SOCIAL PROBLEMS

TOWNE

Social Science Text-Books

Edited by RICHARD T. ELY

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OUTLINES OF ECONOMICS
By RICHARD T. ELY, PH.D., LL.D. Revised and enlarged by the AUTHOR and THOMAS S. ADAMS, PH.D., MAX O. LORENZ, PH.D., ALLYN A. YOUNG, PH.D.

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SOCIAL PROBLEMS

A STUDY OF PRESENT-DAY SOCIAL CONDITIONS

BY

EZRA THAYER TOWNE, PH.D.

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UNIVERSITY OF NORTH DAKOTA

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To

RICHARD T. ELY

TEACHER · FRIEND

PREFACE

The aim in this work is not to make original contributions to the subjects discussed, but rather to collect the available material on these subjects and arrange it in such form that it may be used advantageously as a basis for study in the classroom. The work is intended primarily for beginners in the field of social studies — for those who may desire a better understanding of present-day social questions. It deals largely with facts and with an analysis of conditions. Pure theory is kept in the background as much as possible in the thought that the more abstruse theoretical questions should be left for more advanced courses. The effort has been made to present the matter in as clear and in as impartial a manner as is possible; also care has been taken to give the authority for practically every important statement of fact made. Through the use of the supplementary questions and the references at the end of each chapter, ample material may be found for a college or normal school course on this subject. It is also hoped that the references given and topics suggested will be of assistance to reading circles and study clubs that may wish to pursue such a course of study as is here presented. Although the book deals mainly with the evils, or at least the weaknesses, in our social system, yet it is hoped that a spirit of optimism pervades the work — an optimism based on the knowledge of past achievements in social progress and inspiring us to greater efforts in the future.

The trend of education to-day is toward a better understanding of our own times. The past century was characterized by great advance in the physical sciences — in the control of physical forces. The indications are that the present century may be characterized by great advance in the social sciences — in the control of social forces. Already great movements are under way. Much has been accomplished,

and certainly with a clearer understanding of the problems and of the principles of social control, much more may be accomplished toward making this a better world in which to live. Through this clearer understanding, will the individual be brought to a fuller realization of his responsibilities of citizenship, and be the better prepared to meet these responsibilities.

This, then, has been the aim: to bring before the students of social problems these facts regarding present-day conditions; to indicate certain weaknesses in our social order; to show what has already been done and is being done toward the elimination of these weaknesses; and to impress upon these students, through the presentation of such facts, the possibilities of wise, sane, constructive, social action.

I am under particular obligations to the several authors whose works I have quoted so freely; to the superintendents of high schools and others who, on the receipt of my "Outline" some time ago, made many helpful suggestions, and especially Superintendents Monroe, Street, and Chalgren, who kindly read several of the chapters in manuscript; and to the members of my seminar course in Social Problems — the Misses Aldrich, Atchison, Brauer, Jepson, Lindbergh, Sherwood, and Messrs. Ashton and Rossman of the Class of 1914, and particularly to Miss Jepson, who assisted in the preparation of each chapter, and the Misses Elwell, Fellows, Moore, Phelps, Robilliard, and Messrs. Dean, Putnam, and Wingate of the Class of 1915 — each of whom rendered valuable assistance in the collecting of material on the different subjects; to my colleagues, Dr. H. H. Carter and Dr. H. J. Thorstenberg, who made many valuable criticisms and suggestions; and finally to my wife, who has been my co-worker in every phase of this work from its first inception to the reading of the final proof.

E. T. TOWNE.

Northfield, Minnesota,
April 11, 1916.

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SUGGESTIONS TO TEACHERS

One of the most important purposes of this work should be to train the beginner in the study of the social sciences to find and to use the vast amount of material that is available on such subjects as are here presented. Some of the most valuable material may be had for the asking. The large number of government publications mentioned throughout the text may be secured by writing directly to the particular department or bureau, or through a request to the member of Congress from your district. Each state publishes many records, pamphlets, and reports, which may be obtained by sending to the different state bureaus and departments. Most of our state universities issue bulletins on a great number of economic and social questions.

There are also a great many voluntary associations interested in the study of different phases of the social problems, and doing constructive work toward their solution. These associations have collected some of the most valuable and most recent material in their particular fields, and are glad to furnish this material on request to those interested. *The Survey,* under the heading "Information Desk," publishes from time to time a list of such associations. A recent number gives a list of fifty-one national bodies, with their addresses, which "will gladly and freely supply information and advise reading on the subjects named by each, and on related subjects."

In connection with this work, if the following material is not already at hand, send for the latest Statistical Abstract of the United States (Bureau of Foreign and Domestic Commerce); the Abstract of the latest United States Census, with supplement for your particular state (Bureau of the Census);

such special reports as those on the "Blind and the Deaf," "The Insane and Feeble-minded," "Prisoners and Juvenile Delinquents," "Marriage and Divorce," "Mortality Statistics," and the "Statistical Atlas of the United States" (Bureau of the Census); the latest Annual Report of the Commissioner General of Immigration; the Year Book of the Department of Agriculture; the summary of Labor Legislation for the preceding year, as published each year by the Bureau of Labor Statistics (a Review of Labor Legislation for the preceding year is also published each year by the American Association for Labor Legislation); and the "Monthly Review of the United States Bureau of Labor Statistics." Send for the list of publications of the various bureaus, and from these lists send for such bulletins as deal with the different topics taken up by the class. Secure a list of publications of your own state, and send for such reports and bulletins as would be of value in the course. The reports of the Bureau of Labor should be of particular value in connection with the several chapters on labor conditions. Send for the latest reports of the principal institutions of your state, such as those of the State Prison, Reformatories, State Asylums, and Schools for the Blind, the Deaf, and the Feeble-minded. Also ascertain what is being published by your State University, or other colleges and universities in your state, and how these publications may be secured. Let different members of the class, under supervision of the instructor, send for this material in order that they may familiarize themselves not only with the material, but with the sources from which it may be obtained.

For reference work, two almost indispensable books for this course are, "The New International Year Book" (Dodd, Mead and Co.), and the "American Year Book" (Appleton). The World Almanac, published in February of each year, contains a mass of statistical information regarding the preceding year. Constant reference should be made to these books, because the most recent information on almost every topic considered in the course may be found in these annual publications. The

"New Encyclopedia of Social Reform," edited by Bliss (Funk and Wagnalls), contains much valuable and reliable information on practically all economic and social questions.

A most useful adjunct to any course in Social Problems is *The Survey*, one of the sanest and most constructive publications on social questions. This is a weekly magazine, and contains discussions of present social conditions and problems by some of the ablest investigators and writers in the country. Special semester rates are offered for classroom use.

If only limited funds are available, some of the most valuable reference books are: for the chapters on labor conditions, Carlton, "History and Problems of Organized Labor," and Adams and Sumner, "Labor Problems"; for the chapters on conservation, Van Hise, "Conservation of Natural Resources in the United States"; on our present population and immigration, Ross, "The Old World in the New"; and for several of the chapters, Ellwood, "Sociology and Modern Social Problems." Additional material will be found in reports of state and national conferences and congresses. Other references will be found at the end of each chapter.

An effort should be made to relate the subject matter of each chapter to the present time, and to local conditions. To facilitate this phase of the work a set of supplementary, or research, questions is given to accompany each chapter. In searching for the answers to these questions the students will very frequently find a hint as to where the desired information may be found by noting the references throughout the chapter to similar topics. Particular questions may be assigned to the individual members of the class, these to be reported on in class, the other members taking notes on these reports and being held responsible for the gist of the material so presented. These questions should be assigned two or three weeks in advance of the class work so that the students will have time to send for such material as may be necessary.

It will add greatly to the interest, and to the value of the course, to have the class visit near-by institutions; and to have

persons of prominence in the different fields of social activity address the class on particular phases of the subjects studied.

Students should be encouraged to bring to the class items of information from the various monthly and weekly publications and from the daily newspaper, bearing on the different topics taken up for class discussion. By keeping pamphlets, reports of institutions and associations, clippings, etc., carefully arranged in a filing cabinet, and adding to them from year to year, an extremely valuable, up-to-date reference library on social subjects may be provided.

SOCIAL PROBLEMS

SOCIAL PROBLEMS

CHAPTER I

THE INFLUENCE OF NATURAL CONDITIONS ON ECONOMIC AND SOCIAL DEVELOPMENT

I. General introduction.
II. Configuration.
    1. Altitude.
    2. Natural boundaries and frontiers.
    3. Isolation.
    4. Rivers and lakes.
    5. The sea.
    6. Trade routes.
    7. Area or extent.
III. Climate.
    1. Temperature.
    2. Moisture.
    3. Light.
IV. Soil.
V. Natural resources.
    1. Minerals.
    2. Forest and plant life.
    3. Animal resources.
    4. Motive forces.
VI. General aspects of nature.
VII. Conclusion.

General introduction. — Back of all social problems are two elements, man and nature. Man is the living, growing, conscious element, ever struggling for ascendancy. Nature is the inert, passive, but persistent element, which has profoundly influenced man at every stage of his develop-

ment. Man's progress is largely measured by his increasing control over natural conditions and natural forces. Man is still struggling, that he may the more completely subdue the elements of nature, — that he may compel the forces of nature to do his bidding.

The more primitive people are the more helpless before nature. Their lives are influenced to a greater extent by natural conditions. They have brought fewer of the natural forces under subjection. They are largely dependent upon what nature has supplied for their food, their clothing, their shelter, and even for their simple tools and weapons. Natural barriers, easily overcome by civilized man, are for them insurmountable. They dare not venture far upon the sea with their primitive boats. They have no bridges nor highways and hence must follow routes outlined by nature.

As man advances through the successive stages of his development, he is influenced at every turn by his environment. In his movements over the earth's surface he follows natural highways. He follows the courses of the great rivers, and seeks the natural passes through the mountain ranges. His activities in his efforts to get a living are determined by such natural features as the fertility of the soil, the climate, and the nature of the animal and the vegetable life.

Configuration. — Of these geographic conditions which have influenced man in his development, and are still exerting an influence over his economic, social, and political life, the most evident factor is that of Configuration. In considering the configuration of any country, we think of its altitude, its natural boundaries and frontiers, its isolation, its rivers and lakes, its sea coast, its trade routes, and its area or extent. Each of these has affected the development of the country and the life of its people in various ways.

Altitude. — It is human nature to seek to follow lines of least resistance. From earliest times, people have tended

to congregate within areas having a comparatively low altitude. Nearly all the great cities of the past have been at, or near, the sea level. Some sixteen millions of people, in the United States alone, are living in an altitude of less than one hundred feet above sea level. The lowlands, if they are fertile, invite commercial and political expansion. Such lands are well adapted for agriculture and trade, and are capable of supporting dense populations. High altitudes become settled later and are usually characterized by sparsity of population. Fewer industries are adapted to these higher elevations and fewer people can be supported here. Such agriculture as is found here is carried on under difficult conditions which become more adverse as the altitude increases. In the mountain regions of Switzerland, the shepherd tends his small flock; while on the mountain sides, by means of steady, patient toil, the slopes are terraced, and agriculture on a very small scale becomes the prevailing mode of making a living. Comparatively few people permanently reside in higher altitudes, and practically the only industry carried on here is that of mining.[1]

Natural boundaries and frontiers.[2] — A political map of Europe placed by the side of a physical map of the same territory will show at a glance the remarkable influence the natural features have had in determining the present boundaries of the various states. Of these natural boundaries, the sea is the most absolute, particularly with the earlier peoples. The mountain range is next in importance, but this is less definite than the shore line, and then, too, it is often broken by natural passes. Great rivers have often served as natural boundaries, although the river valley has more often been the center of some racial or political group.

The progress of any people, whether it be that of an early

[1] Numerals refer to list of references at close of each chapter.

primitive race, or the most advanced nation of to-day, is greatly hampered by the lack of protection which a natural barrier affords. Their industrial life cannot reach its highest development if constantly interrupted by attacks from without. It is likewise an enormous drain upon the wealth and energy of a country to have to remain in a state of constant preparedness for war. It is in such countries that militarism reaches its highest development. The French and the German people are separated from each other by the fertile valley of the Rhine. This valley has been a scene of conflict between these nations from the division of Charlemagne's empire down to the present time. One cannot but reflect on how the course of history might have been changed, and how enormous the saving to each country in human life, and in all of the other terrible costs of war, could these nations but have been protected from each other by a great natural barrier.

Those countries in Europe that are separated from the others by natural boundaries were the first to be developed. The Grecian, Italian, and Spanish peninsulas were the centers of unified national development earlier than the other parts of Europe. England had the sea as a natural boundary. This detachment from the continent was a factor in the early breaking down of feudalism (and serfdom), in the more rapid advance of personal and political liberty, and in greater freedom from invasion and wars on her own soil; all of which materially aided her in securing the position of supremacy to which she later attained.

Along these boundaries, on the frontiers,[3] we find various influences affecting the lives of the people. There is more of a mingling with people of other races and of other religions. This brings in new ideas and new customs. At the same time, the distance from the center of the national government tends to weaken the influence and the control over these outlying sections. Uprisings against the central

authority are more apt to occur here. The people are more impatient of restraint, are more imbued with the spirit of freedom, of enterprise, and of self-reliance.

Isolation.[4] — Natural barriers are advantageous to a certain degree. If too exclusive, they may produce isolation. To be cut off from intercourse with other communities, and to lose the stimulus of contact with new ideas, is a serious handicap to the best national progress. This prevention of the intermingling with other peoples tends to produce greater economic and racial unity, and may stimulate the early development of a people. Such isolated and protected countries as Crete, Phœnicia, and Greece, in their early days had a rapid, almost precocious growth of civilization, but soon reached a period of stagnation, and then of decline. The general effect of isolation upon any people, as upon a single individual, is to make them self-sufficient, to prevent progress; hence in the more isolated communities we are apt to find more ignorance and superstition, and an earlier crystallization of thought and custom.[5]

Rivers and lakes. — Rivers play a most important part in the development of all countries, and particularly in the development of the larger countries. It is these natural highways that, in the early stages, make the land accessible. One need but compare America with Africa[6] to see what an important part rivers may play in the opening up of a continent to settlement and commerce. In America, the many navigable rivers form a network of intercommunication. The rivers of Africa do not form such a network, and this is one reason why Africa, though so long ago discovered, is still but slowly opening up to the inroads of commerce.

The first settlements in the newer countries are almost invariably made near the mouths of the rivers. As the people proceed inward, the most natural route for them to take is along these same rivers. The westward movement

of the people within the United States has been along the great water courses. Likewise the Great Lakes, with their 4000 miles of shore line, have influenced the course of migrations, and the locations of cities and towns. Of the twenty largest cities in the United States, eight are on the sea, six on the rivers, and five on the Great Lakes.

The very fact that a river is a natural highway makes it a poor boundary.[7] The tendency is rather for the entire valley to become a racial and social unit, to be settled by people of the same race, with similar tastes and customs, and engaged in similar lines of industry. When such a valley is located between two conflicting nations, it is apt to be a center of conflict.

The sea.[8] — In early times, with navigation still in its cruder stages, a water front is a protection to a people. Later, as man advances, and as navigation becomes more highly developed, the ocean becomes his most important highway. By water routes more distant lands are made accessible. The products of other lands are made available for his use. Man is stimulated through contact with other civilizations.

Accessibility by sea[9] is in many ways more important than by land. A great many more routes are made available, and routes to the more remote portions of the globe. Such accessibility stimulates the development of the resources of a country, and the carrying on of trade and commerce with other nations. Russia has been seriously handicapped in the development of its resources through not having any favorable ocean outlet for its products. One of the principal causes of the recent Russo-Japanese war was the desire to secure such an outlet.

Transportation by water is much cheaper than by land. This is important in determining the direction of commerce. One reason for the developing of the interior waterways is to make these sections of the country more readily accessible

Karl de Schweinitz

AN EARLY TRADE ROUTE.

Along this canal workers in a dying industry toil eighteen hours a day for a meager living.

to the ocean trade. The location of many of our largest cities is determined by the natural facilities for shipping which they possess.

The industries in many localities are determined by nearness to the sea. Such industries as fishing and shipbuilding are carried on almost exclusively in the coast towns. Ocean transportation in itself gives employment to large numbers of the population.

Trade routes. — Natural routes of travel and trade have played an important part in the development of all countries. The valleys of the Tigris and Euphrates, of the Danube and the Rhine, of the St. Lawrence and the Ohio, have been great natural highways, and have seen successive migrations of people along their courses. To-day, man is pushing up the valley of the Yukon and down the valley of the Mackenzie. The great natural passes of the Alps have directed the course of travel through that region since the early Romans first wandered north into central Europe.

First the rude trails, then the roadways, and finally the railways, have followed these "nature-made thoroughfares." Cities have been established at advantageous points along these routes. Although man is now able to overcome the desert and tunnel the mountain, his travel and his commerce are still largely along these natural highways.

Area or extent. — The area or extent [10] [11] of any country is of varying importance in the successive stages of its development. In the early stages, a small area brings the people into closer contact with one another. This tends to develop a national consciousness and facilitates the establishing of a more strongly centralized government. All parts are in close communication with each other and with the center of government. On the other hand, a large area is apt to have a greater diversity of peoples. Communication with the remote parts is much more difficult,

and there is not that bond of sympathy or of ideas that we find in the smaller, more compact groups. Difficulties of control over these outlying sections are much greater. There is apt to be such a diversity of industries and of interests as to engender sectional strife. These factors tend to retard the growth of national unity.

In the later stages, restriction in area may prevent a people from becoming powerful. Area necessarily limits population, and a small nation, through its limitation in numbers alone, may be prevented from becoming one of the powerful nations of the world. A large area with great resources can support a large population and hence has far greater possibilities. Also a large area is apt to have greater natural resources, to furnish a greater variety of occupations, and hence is much more nearly self-sustaining, — its people are less dependent upon the products of other countries.

A limited area with an increasing population means a more intensive agriculture and a fuller utilization of the natural resources. Also, a more dense population gives rise to changed social conditions and to many new social problems.

Climate.[12] [13] [14] — The climate of any country — that is, its light, heat, and moisture — largely determines the fertility of the soil, and consequently the animal and vegetable resources of that country. These, in turn, have the greatest influence in determining the industries, and even the characteristics, of the people. Climate may be said to limit the habitable portions of the globe, and it underlies many of the other natural features. One need but think of the vegetation of the tropical regions as compared with that of the frigid zones, or of the returns for man's efforts in the fertile valleys as compared with the returns in the arid desert regions, to realize how all forms of life — vegetable, animal, yes, even human — have been influenced by climatic conditions.

Temperature. — The tropics have been called the " cradle of humanity," [15] and the temperate zones the " cradle and

school of civilization." Many of the earliest states arose and flourished in a warm climate, where but little effort was required to make a living. Man's food was furnished directly by nature, and he needed but little clothing and shelter; but the tendency was for him to rely upon nature rather than upon his own efforts. Through lack of stimulus to exertion, the people become indolent, lacking in initiative. Stagnation has resulted, and we find no strong civilizations to-day which have developed in the heat of the tropics. Extreme heat has an enervating effect upon any people, and those living under such conditions have not the vigor or the energy of the people living in a cooler and more bracing atmosphere.

The opposite extreme of temperature is quite as serious a handicap to man's development. The resources in the very cold regions are extremely limited. But few occupations are possible, and only a very sparse population can be supported. Life becomes very monotonous. Under such adverse conditions, practically all of man's energy is expended in the mere effort to get a living, and but little advance is made in improving his condition.

Because of the unfavorable influences of these extremes in temperature, we find that nearly all of the great events in history have taken place within the temperate regions. The great civilizations of the world have developed here, and it is within these areas that man is expected to make the greatest progress in the future.

Moisture. — The influence of humidity is closely bound up with that of temperature, and its extremes have much the same influence as extremes in temperature. The map of any country shows a close relation between its rainfall and the density of its population. We find our great forests only within those regions where the rainfall is sufficient to maintain them. The vegetable life, and even the animal life, of any section is largely determined by its rainfall.

Sections with but a very low rainfall are apt to be dry, arid wastes, capable of supporting but a very thinly scattered population; whereas those sections having frequent rains are often found supporting large populations on comparatively small areas.

Light. — The length of day and night has its influence upon the maturing of the harvests, and upon the habits of a people. As we approach the Arctic Circle, the sun shines throughout the summer months during a much greater proportion of the twenty-four hours. This greater length of day in the northern sections enables the grains to mature, even though the seasons are much shorter than farther south. The long night, with its consequent periods of enforced idleness, is not conducive to the forming of habits of industry. But few industries can be carried on here, and such work as is done is carried on in a desultory, unsystematic way, and under very great disadvantages.

Soil. — The fertility of the soil[16] largely determines the density of the population that can be supported upon any given area. This in turn affects the social life of the people in many ways. A fertile soil tends to keep people at home, and results in a fixity of abode. This gives an opportunity for the growth of social institutions, and for the establishing of more stable forms of government.

An infertile soil has the opposite effect. It can support but sparsely settled communities. As the population increases, men are compelled to look elsewhere for the means of existence. It does not lead to the establishing of permanent homes, but rather to a wandering, nomadic life. People have to rely upon industries other than agriculture, and often depend upon other lands for their food supply. This frequently leads them into conflict with other peoples.

A reasonable degree of fertility is undoubtedly more conducive to man's development than either extreme. In the one case, nature is so lavish as not to require sufficient effort

to develop strength and vigor; in the other, she discourages effort through the meager returns which man gets for his industry.

Natural resources. — The natural resources[17] of the various countries have played a most important part in all stages of their development. They have not only often determined the movements of the population, but have also determined the concentrating of the people within particular areas, as well as the industry in which many of them have engaged. They have furnished the raw materials for many industries, and have been the source of great wealth for many sections.

Minerals. — Mineral resources have played so important a part in man's development that successive stages of his advance have been called the "stone age," the "bronze age," and the "iron age."[18] The search for mineral wealth has been back of many of the expeditions of discovery from the early expeditions to the tin mines of Devon, or Cornwall, to the opening up of the gold mines of South Africa and Alaska. The desire for gold and silver and other precious metals has been back of many colonization schemes, has led people to the most remote parts of the earth, and has been the cause of many conflicts between nations. The early settlements in Peru, in Mexico, and in our own western states were made by men attracted there primarily because of the rich mineral deposits. These resources have been the basis, not only of great individual fortunes, but also of the wealth and power of many of our great nations. The kind of mineral wealth has determined the kind of industry in many localities, and these, in turn, have affected social conditions. The close proximity of coal and iron has likewise determined the location of many of the greatest manufacturing centers.

Forest and plant life. — The forests not only furnish great natural wealth in such products as lumber, tar, pitch, and

turpentine, but determine the character of many industries. They also affect the rainfall, and consequently the fertility of the soil. The lumber industry differs from many industries in that it employs almost exclusively men, and is of a seasonal character. That men can be employed in the logging camps but a few months of the year increases the complexity of the problem of unemployment.

Grains and fruits have been an important factor in the food supply of practically all peoples. Particular localities are especially adapted to the raising of certain products; hence we find great areas largely given over to the raising of rice, cotton, tobacco, corn, wheat, or whatever can be most advantageously produced.

Animal resources. — Another important source of food supply from the earliest time down to the present has been wild game and fish. Fisheries have determined the location of many settlements, and have given occupation to many people. The hunting of fur-bearing animals has led men into new and unexplored regions, and has opened the way for later settlements. The presence of animals that could be domesticated, such as the horse, the cow, and the sheep, have played a most important part in man's economic development. The domestication of animals assured him of a more permanent food supply. He relied less upon hunting and fishing, and tended to occupy a permanent abode. Animals were early made to serve him as beasts of burden, and have aided him in his migrations and in the tilling of the soil.

Motive forces. — Of the motive forces[19] that man has made to serve him, the first was the strength of the animals that he had domesticated. With such aid, he was able to travel greater distances and much more quickly, to carry greater loads, and to till the soil with greater ease.

The power of the winds and the streams was next brought under subjection. From earliest times down to the past

century, wind was the most important factor in water transportation, and it has been used to turn the mills in many countries. The power of the waterfall has long been known and utilized. Advantageous points for the utilization of such power have determined the location of many of our most important industrial centers. It is estimated that the power of Niagara alone is equal to about 3,800,000 horse-power. Of the total primary stationary power now being used in the United States, it is estimated that about one fifth, or six million horse-power, is derived from our rivers, and that at least fifty million more horse-power remains to be developed.[20]

Since the discovery of steam and its application to industry, man has been less dependent upon the location of waterfalls. He has been able to establish the mill or the factory wherever fuel and water have been available. By the use of electricity,[21] he is able to transport power to great distances, and to utilize it in innumerable ways.

General aspects of nature.[22] — Nature not only supplies various products which man can use in the satisfaction of his wants, and forces which he can compel to aid him in his work, but also exerts an influence upon the temperament and character of man himself.[23] It has been said that the people living in the mountain regions, or on the vast prairies, are apt to be overawed by nature. The imagination has freer play. They are less inclined to attempt to explain natural phenomena, and are more superstitious. In other parts of the earth where the phenomena are not so awe-inspiring they do not hold man in such terror. He has more confidence in himself and makes more effort to understand nature. Here nature appeals rather to the understanding, and man progresses in all lines much more rapidly. Semple speaks of the absence of artistic and poetic development in Switzerland and the Alpine lands as being due to "the overwhelming aspects of nature there, its majestic sublimity

which paralyzes the mind"; and these regions are compared with the lower mountain and hill country, "where nature is gentle, stimulating, appealing, and not overpowering," which has produced many poets and artists.

Conclusion. — In these various ways have geographic conditions played an important part in man's development. In the early stages of his advance he was practically helpless. He was dependent upon what he found for the satisfaction of his wants. As he grew in intelligence, he began to make things. This was his first step towards overcoming his physical environment. Even yet he was largely dependent upon what was supplied him directly by nature. Consequently, we find him living in those regions where nature had been the most lavish, where his food supply was found ready at hand and could be secured with the least effort and with the most primitive means, where the climate was such that he could readily protect himself against its extremes, and where only the simplest processes of life were required for his existence.

As man progressed, he became less directly dependent upon nature.[24] He began to raise things, and thus to produce his own food supply. Through the use of clothing, the building of houses, and his knowledge of fire, he was able to withstand greater extremes of climate. Inventions and discoveries increased his power. The paddle, the oar, the sail, and finally steam, have enabled him to go to the most remote parts of the earth. Improved transportation facilities have enabled him to secure from these remote regions all manner of products for the satisfaction of his wants.

In these simple ways did man begin to modify his environment.[25] [26] We need but look about us to realize the success that has come to him. The sea, once a natural barrier, has become his most important highway, connecting him with all parts of the earth. He has been able to tunnel the mountain and bridge the stream. Improved methods of travel,

of transportation, and of communication have broken up his isolation. He is brought in touch with other peoples and other conditions. Through drainage and dikes, great areas of low lands have been redeemed, while through irrigation great tracts of arid lands have been made fertile. Through sanitation he is making fever-stricken places habitable. Through transmission of power he has become less dependent upon the waterfall or the coal beds for the location of his industrial centers. As an intelligent, resourceful, thinking being he has been able to overcome these natural barriers, to make the arid regions contribute to his sustenance, and even to compel the forces of nature to assist him in his varied activities.

The part that nature played in influencing man's development was for a long time greatly underestimated. Later the tendency was to go to the other extreme and attempt to explain all social phenomena in the light of man's physical environment. While not underestimating the influence of natural conditions, it is of great importance to us to realize what man himself has done, and is doing, in resisting and in overcoming nature; and what man can contribute to human welfare through the conscious directing of natural forces.

QUESTIONS

1. Why was primitive man so dependent upon nature?
2. In what ways has the configuration of the earth's surface influenced man's development?
3. How has altitude affected the location of peoples? Of industries?
4. Man's progress has been influenced in what way by natural boundaries and frontiers?
5. What is the general effect of isolation upon any people?
6. How do rivers influence settlements?
7. Does a river make a good boundary? Why?
8. Explain the importance of accessibility by sea.
9. Natural routes of travel have played what part in the development of a country?

10. A small area may have what influence on the development of a country? A large area?
11. What phases of life are influenced by climatic conditions?
12. Why have the tropics been called "the cradle of humanity"?
13. Why are the temperate zones spoken of as "the cradle and school of civilization"?
14. What relation is there between the rainfall of a country and the density of its population?
15. What effect has the length of day and night upon the industries of a people? Upon the habits of a people?
16. The fertility of the soil has what bearing on the growth of social institutions?
17. In what ways have the mineral resources of a country influenced man's development?
18. How have the forests and other plant life contributed to man's wants?
19. What are some of the principal animal resources of a country?
20. What changes have taken place in the motive forces used by man?
21. In what ways do the general aspects of nature affect the character of man himself?
22. In what ways has man modified his environment?

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CHAPTER II

POPULATION

I. Present status.
II. Rate of increase.
III. Density.
IV. Urban and rural.
V. Distribution by natural features.
VI. Center of population.
VII. Race.
VIII. Nativity.
IX. Sex.
X. School Age.
XI. Illiteracy.
XII. Voting strength.
XIII. Potential militia.
XIV. Intercensal estimates of the population.

Present status. — In studying the social conditions of any country, naturally the first thing about which one would need to know is the number of people living within its boundaries. Approximately 105,710,620 people were living within continental United States at the time of the 1920 Census.[1] In comparing this population with that of the other great countries of the world, we find that it is only about one fourth of the population of China, a little less than one fourth of that of the British Empire, and about three fifths of that of Russia.[2] These are the only countries in the world having a larger population than the United States. Of the countries having fewer people than ours, France with her colonies comes first, with a population closely approximating that of the United States. Next in size come Germany and Japan, each with a population equal to about two thirds of that of this country. The populations of England and Scotland, of Prussia, and of France are

about the same, each being about two fifths that of the United States.

If we add to the population of continental United States that of all its outlying possessions, we find that about one hundred and eighteen millions of people were living under the American flag in 1920. Of the total number living in these outlying possessions, over four fifths are found within the Philippines, and about one tenth in Porto Rico.

Rate of increase. — Quite as important as the number within a country, is the rapidity of its growth in population.[1] The United States, being a new country, has grown far more rapidly than any of the older countries of Europe. The population of the United States is about twenty-seven times what it was when the first census was taken in 1790. It has just about doubled within the last thirty-five years, whereas the population of England has doubled in the past sixty years, and that of France has increased only about one third in the past one hundred years. Since the first census, our population has increased about one third in each decade from 1790 to 1860, one fourth in each decade from 1860 to 1890, one fifth in each of the two decades between 1890 and 1910, and one sixth from 1910 to 1920.

Census Year	Population of the United States
1920	105,710,620
1910	91,972,266
1900	75,994,575
1890	62,947,714
1880	50,155,783
1870	38,558,371
1860	31,443,321
1850	23,191,876
1840	17,069,453
1830	12,866,020
1820	9,638,453
1810	7,239,881
1800	5,308,483
1790	3,929,214

This table shows the population of the United States as enumerated at each census from 1790 to 1920 inclusive.

The rate of increase is much less in the eastern part of the United States than in the country as a whole, and much more rapid in some of the western sections. In one of the Western states, Arizona, the population increased more than 50 per cent within the last decade. In three states, Mississippi, Vermont, and Nevada, the population showed a decrease. In only one of the states was this decrease more than one per cent. This was in Nevada, and here the decrease was about five and one half per cent. The westward drift of the people, and the exceptional industrial development of certain regions of the West, account for the much greater increase in the Pacific and Mountain divisions.

Density. — The density [3] of a country's population is of even more importance than the number of people, for it more directly influences the social and economic life. We find the greatest difference in the densities of the different sections, which vary all the way from four people per square mile in the Mountain division to two hundred and twenty-two in the Middle Atlantic division; and from less than one per square mile in Nevada to five hundred and sixty-six in Rhode Island. The average for the United States as a whole is thirty-five and one half per square mile. The extent to which our population is concentrated within a comparatively small section is shown by the fact that about two fifths of the total population is found within a land area comprising only about one fourteenth of the entire country. The increase in density for the last two decades has been about five per square mile for each decade. Of the outlying possessions, Porto Rico has by far the greatest density. It is over ten times that of the United States as a whole, and is exceeded only by Rhode Island, Massachusetts, and New Jersey. At the other extreme stands Alaska, with one tenth of one per square mile. The density of the population of France is about

seven times, and that of England is about twenty times, that of the United States.

Another way of indicating the density is by the average area per inhabitant. If in Rhode Island the land were to be divided equally among its inhabitants, each one could have but one and one tenth acres; whereas in Nevada, a similar division would give each person nine hundred and eight acres. If the total acreage of the United States were to be so divided, each person would be entitled to a farm of eighteen acres. In 1900, a similar division would have given to each person twenty-five acres, and in 1890, thirty acres.

Urban and rural. — The extremely rapid growth of the cities has undoubtedly been one of the principal reasons for our failure in municipal government. Systems of water-works, of lighting, of transportation, and even forms of city government have been rapidly outgrown, and have had to be replaced by new. The many problems arising out of the congestion of the population in the cities have been multiplied through this change from a population chiefly rural to one which is nearly one half urban. At the time of our first census, in 1790, only one thirtieth of the people were living in cities of eight thousand or more, while at the last census more than two fifths of the people were in cities of this size.

In its last report, the Census Bureau classifies as urban that population in cities or other incorporated places of twenty-five hundred or more. The remainder of the territory is classed as rural. On the basis of this classification, 51.4 per cent of the population is urban and 48.6 per cent rural. During the past decade, the rate of increase for the urban population has been nearly five times that for the rural population. The highest urban population is found in New England, where four fifths of the people live in cities. More than one fourth of the people in the United States are living in the sixty-eight cities of over one hundred

thousand inhabitants, while nearly one tenth of the total population resides in the three largest cities, New York, Chicago, and Philadelphia. Over one twentieth of our entire population is found in New York City alone.

Distribution by natural features.[5] — *Drainage.* — The three great natural drainage basins are the Atlantic slope, the Great Basin, and the Pacific slope. About 95 per cent of the inhabitants live in territory which is drained, directly or indirectly, into the Atlantic. More than one half of the population live in the region drained into the Gulf of Mexico, and about one thirty-third in that country drained into the Pacific.

Altitude. — The early settlements in this country were along the seacoast, and consequently at an altitude of only a few feet above sea level. As the population has moved westward, the higher altitudes have become populated, and the movement is still toward regions of greater altitudes. By far the greater population is living between the altitudes of one hundred and one thousand feet above sea level, although we find one sixth of the entire population living less than one hundred feet above sea level. In altitudes above one thousand feet, the population grows rapidly less, because of the more barren and sterile regions. This decrease continues until an altitude of some five or six thousand feet is reached, when we find a slight increase because of the mining operations carried on in these higher mountain sections. Only one one-hundredth of the entire population is found above an altitude of five thousand feet.

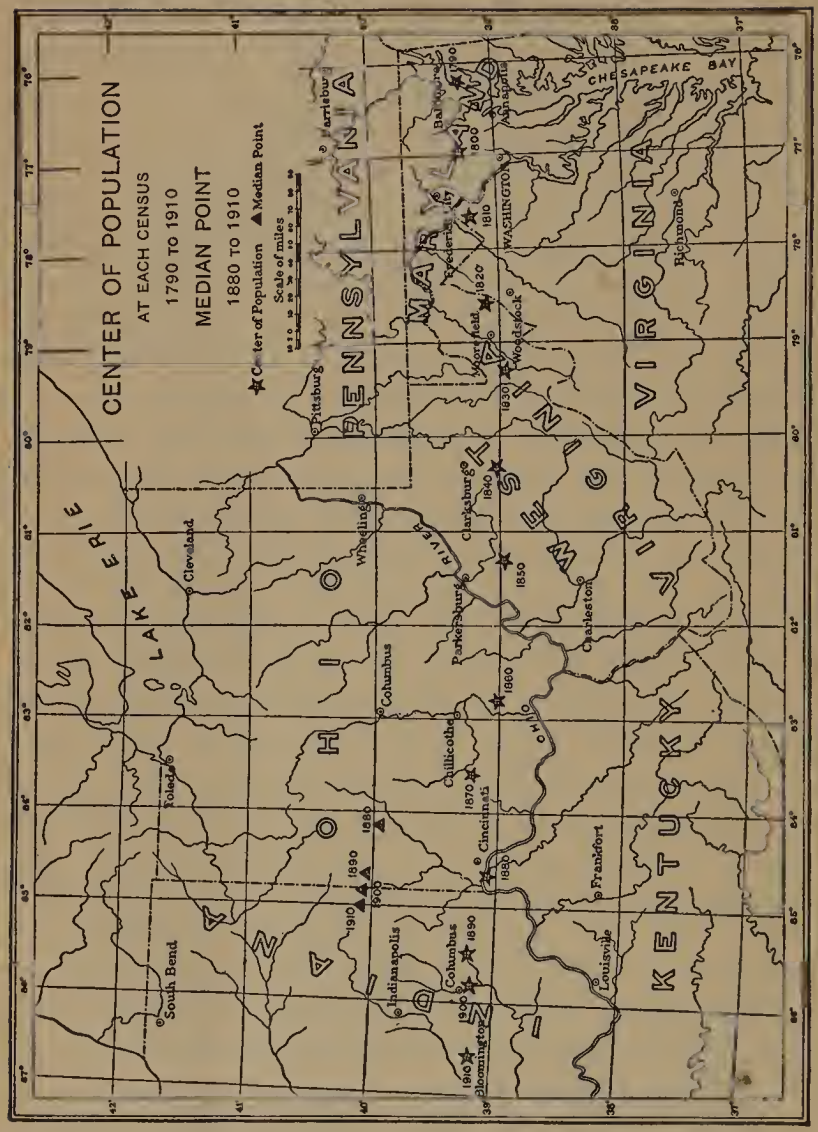
Rainfall. — There is a decided tendency for people to gather within those regions where the rainfall assures favorable crops. The average rainfall for the entire United States is 29.6 inches, but the amount of rain varies in the different sections from none at all to one hundred and twenty-five inches. Practically three quarters of the people of the United States live in regions where the annual rainfall is

between thirty and fifty inches. As the rainfall becomes more or less than this amount, the population diminishes very rapidly. In the great arid regions of the West, embracing two fifths of the entire area of the country, the rainfall is less than twenty inches, and in all this region we find but one thirty-third of the total population.

Temperature. — The mean annual temperature of the United States is 53 degrees Fahrenheit, and we find a large proportion of the people living in regions having an average near this. More than three fifths of the entire population live in an average temperature of between 45 and 55 degrees, while only one twenty-fifth live within those regions where the temperature reaches an average of 70 degrees.

Center of population.[6] — A careful distinction must be drawn between the center of population and the median point. The median point is the point of intersection of a north and south line which equally divides the population, with an east and a west line which likewise equally divides it. The center of population has quite a different meaning. This is said rather to represent the center of gravity of the population, and is that point which could be reached with the minimum aggregate travel if all the people in the United States were to travel in direct lines to this one point. From this definition, it is evident that any individual would affect the center in direct proportion to his distance from it. In determining the median point, distance is not taken into account. Any movement of the population within one of the four sections made by the median lines would not affect the median point; while any movement toward or away from the center of population would have its effect in changing the location of that center.

At the last census, the center of population was found to be in Owen County, Indiana. During the last decade, the center of population moved westward approximately ten miles, and northward only two tenths of a mile. Since



Center of Population, 1790–1910.

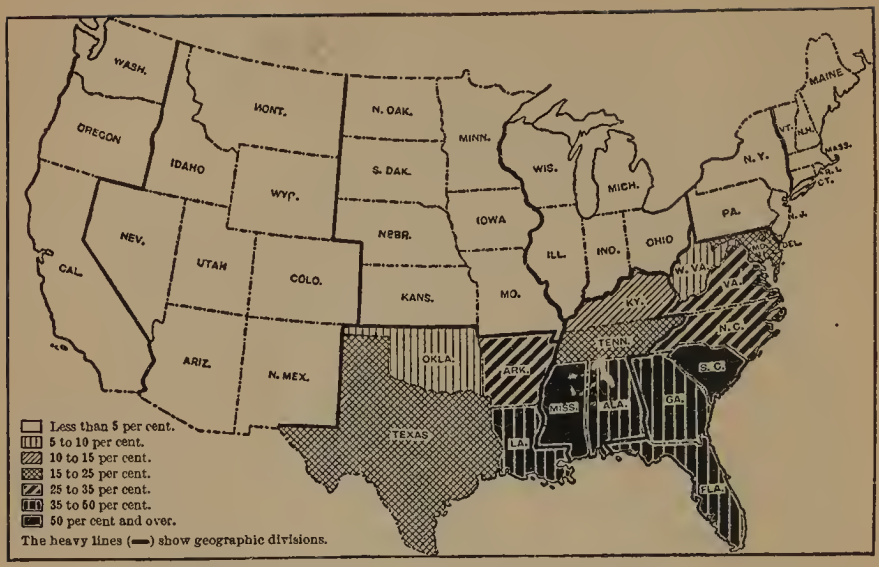
the first census, when the center of population was near Baltimore, it has moved westward five hundred and sixty-seven miles, averaging a little more than forty-three miles a decade. In all this movement westward, it has followed very closely the thirty-ninth parallel.

The center of area of the United States is in the northern part of Kansas, near the Nebraska border, and midway between the east and west boundaries of the state. This point is 657 miles west and 51 miles north of the center of population.

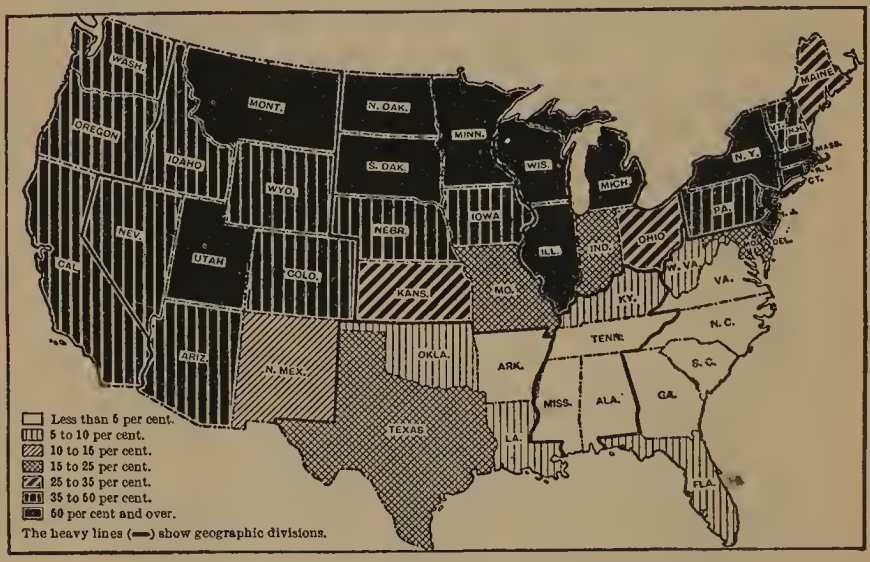
Race.[1] — Of the total number of people in the United States, about nine tenths are white and one tenth negro. The other races make up less than one half of one per cent of the population. The negro population, although it has increased steadily, has increased less rapidly than the white. At the time of the first census, negroes constituted a little less than one fifth of the total population. During the past decade, the rate of increase of the whites has been more than double that of the negroes. This is accounted for by the fact that immigration brings in white people almost exclusively. The negroes are largely congregated in the Southern states, where they constitute about one third of the population. In two of the Southern states, Mississippi and South Carolina, the negroes constitute more than half of the population. In eighteen out of the thirty-two Northern and Western states, of the total population less than one per cent are negroes.

The total number of Indians in the United States is 242,-959. During the past several decades, the number of Indians has not shown any marked increase or decrease.

The number of Chinese in the United States is reported as 61,686, and of Japanese 111,025. More than one half of all the Chinese and Japanese in this country are found in California.



THE NEGRO ELEMENT IN OUR POPULATION.



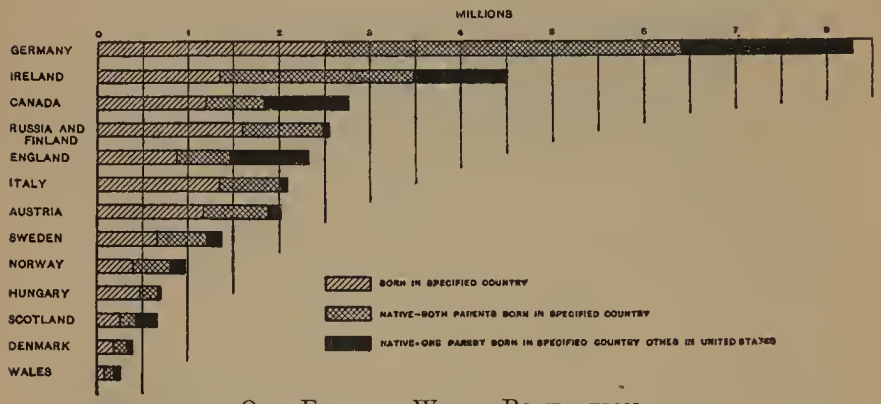
THE FOREIGN ELEMENT IN OUR POPULATION.

Nativity.[8] — Of the total population of the United States in 1910, 85.3 per cent were native-born, and 14.7 per cent were foreign-born. Of the white population, approximately 83.7 per cent are native-born, and 16.3 per cent are foreign-born. This means that more than one sixth of our white population, and more than one seventh of our entire population, are foreign-born. In order to understand the racial characteristics of the thirteen million foreign-born within this country, we must know from what countries they came. Germany has contributed much the largest proportion, or about two and a half million. This is nearly one fifth of the number of foreign-born. Next in importance is Russia, then Austria-Hungary, each contributing about one eighth. Ireland, Italy, the Scandinavian countries, Great Britain, and Canada come next in order, each contributing one tenth.

Even more important than this is the change which is taking place with respect to the countries from which our immigrants are largely drawn.[9] The proportion of our population which came from northwestern Europe declined very materially during the past decade, from 67.8 per cent to 49.9 per cent. During the same decade, the proportion from southeastern Europe increased from 17.7 per cent to 37.4 per cent, or was more than doubled. Another way of indicating this change in the make-up of our foreign population is by comparing some of the actual numbers from the countries at the beginning and at the end of the decade. There were 312,295 fewer people from Germany, and 263,208 fewer from Ireland, residing in the United States in 1910 than there were in 1900. During this same period, there was an increase in numbers of 1,091,719 among the natives of Russia and Finland, of 1,033,593 among the natives of Austria-Hungary, and of 859,098 among the natives of Italy.

This striking change which is taking place in the elements of our population is shown by comparing our present popu-

lation with that of some two generations ago. In 1850, the countries of northwestern Europe had contributed 90 per cent of our total foreign-born population. In 1910, these same countries had contributed less than 50 per cent of the total. On the other hand, the countries of southern and eastern Europe, which had contributed less than one per cent in 1850, had contributed 37.4 per cent in 1910. In 1850 nearly seven eighths of our foreign-born population had



Our Foreign White Population.

come from the three countries, Ireland, Great Britain, and Germany. In 1910 but three eighths of our foreign-born had come from these countries.

The proportion of foreign-born varies greatly in the different geographic divisions. It is much higher in the Northern and Western than in the Southern states. We find much the highest percentage in the New England and Middle Atlantic states, where it is 27.9 per cent and 25.1, respectively. In the Pacific states, it is 22.8 per cent, while in the East South Central division it is only one per cent. We also find great variations in the different states, several of the Southern states having less than one per cent of foreign-born. There are three states having more than 30 per cent, Rhode Island, Massachusetts, and New York.

A very decided tendency to gather in particular districts[10] is shown among the foreign-born. Nearly two fifths of all white persons in the United States having Austria as their country of origin are found in New York and Pennsylvania. More than two fifths of those having Hungary, and nearly one half of those having Italy and Russia as their countries of origin, are found within these same two states. Likewise, nearly a fourth of the Irish live in New York, more than a third of the Welsh in Pennsylvania, and nearly three tenths of the Norwegians and about one fifth of the Swedes in Minnesota. Again, certain foreign elements appear very strong in the population of some particular states. For example, more than one fourth of the entire population of Minnesota is Scandinavian, nearly one fifth is German, and about one third of that of Wisconsin is German.

The foreign-born likewise have a marked tendency to gather in urban communities. Nearly three quarters of those of foreign birth live in the cities, and the newer immigrants show an even more decided tendency than did the former to congregate in these urban centers. This may be partly accounted for by the fact that there is now comparatively little conveniently located and fertile land available for settlement or obtainable at a low price. New York City alone contains practically one seventh of the foreign-born population of this country. Nearly all of our large cities, excepting those of the Southern states, show a much larger proportion of foreign-born than does the country as a whole. Among those having high percentages of foreign-born are Fall River (42%), Lowell (40%), New York City (40%), Boston (36%), Chicago (35%), San Francisco (34%), Minneapolis (28%), Philadelphia (24%).[11]

Sex.[12] — Somewhat over one half of the estimated population of all the world has been enumerated as to sex. The results have shown a slight average excess in the number of males. The distribution of sex in any country is largely

determined by whether or not immigration or emigration has been the greater. In the newer countries of the world, such as Australia, some parts of Africa, Canada, and the United States, where immigration has been comparatively large, the number of males has been considerably greater than the number of females; while in the principal countries of Europe, where emigration has been the larger, the number of females exceeds the number of males.

In the United States there are over two million more males than females, the ratio being one hundred and four to one hundred. This excess was the greatest in 1910, and was due to the very large immigration in the preceding decade. Among the foreign-born whites enumerated in 1910 who had arrived in the United States during the decade, there were no less than one hundred and sixty-six males to one hundred females. Since 1820, the date of our first reliable data, the excess of males has been greater at each succeeding census, with one exception. There was a decline in the excess of males during the decade 1860–70. This is attributed to the large loss of life among the men in the Civil War, and to the falling off of immigration during this period. Among the Chinese and Japanese the excess of males is very great, and among the foreign-born white the proportion is one hundred and twenty-nine males to one hundred females.

Within the United States we find a great variation between the older Eastern states and the newer Western states. There are but five of the states in which there is an excess of females, these being Massachusetts, Rhode Island, Maryland, and North and South Carolina, all bordering on the Atlantic coast. There are three states having a proportion of more than one hundred and fifty males to one hundred females. These are Montana, Wyoming, and Nevada. This great variation within the United States may be explained by the fact that more men than women venture into the newer

sections to establish homes. Mining and the lumber industries of the West are carried on almost exclusively by men. More of the women remain at the old homes, and more industries adapted to the employment of women are found in the East than in the West. As the newer sections become more closely settled, it is probable that this excessive disproportion of the sexes will disappear.

School age.[13] — At the taking of the last census, it was found that one fifth of the total population of the United States had attended school at some time during the preceding year. About three fifths of all those between the ages of six and twenty years are in school. About one half of those six years of age, also one half of those sixteen years of age, attend school at some time during the year. From the age of six to eleven, the proportion increases, until, at this latter age, 91 per cent is reached. From that age the proportion decreases slowly, until, from sixteen years on, the decline is very rapid. The highest proportional school attendance is found at the ages of ten, eleven, and twelve years, but even at these ages only nine tenths of the children attend school. The rapid decline after fourteen years of age is undoubtedly due to the fact that this is the legal age for employment in many states. The economic conditions, as well as the compulsory school laws of various states, are important factors in determining the school attendance.

Illiteracy.[14] — The 1910 census classes as illiterate all persons unable to write, regardless of ability to read. On this basis, there were more than five and a half million illiterates ten years of age and over. This means that 7.7 per cent of the population of this age must be classed as illiterate. This proportion is largely due to the number of negroes and of foreign-born within the United States. The proportion of native whites is 3 per cent; of the foreign-born is 4 times this, or 12 per cent; of the negroes is 10 times this, or 30

per cent. This high proportion among the negroes, however, is declining very rapidly. In 1910 it was only one half of what it was in 1890. For the past thirty years, each successive census has shown a hopeful decrease in the total number of illiterates, the proportion having decreased more than one half within that time.

In considering the illiteracy of the sexes, it is found that among the whites the percentage is slightly greater for males than for females. This may be accounted for by the excess in the number of males among our immigrants. It would also seem to indicate a changing attitude toward the education of women. The proportion of illiteracy in the North and in the West is approximately the same, but it is more than three times as great in the South, due, of course, to the large proportion of negroes there.

It is almost impossible to make any exact comparison of illiteracy in this country with that in foreign countries[15] because of the different methods used in estimating the degree and the amount of illiteracy. In some countries the only basis of calculation is the number of men and women who cannot sign the marriage register. In others, the estimate is made on the basis of the reading ability of the army recruits. In some of the European countries illiteracy is so uncommon that questions regarding it are not included in the census enumeration. A great difference is found in the degree of illiteracy among the people in the northwestern part of Europe, and in the eastern and southern parts. The lowest percentage is found among the German and Scandinavian peoples, while the highest percentage is found in Spain and Portugal in the southwest, and in Russia in the east. In Germany, Denmark, and Sweden, the illiteracy as based on the proportion in the army recruits is less than one half of one per cent. About one fourth of the population of Austria, one half that of Spain, and nearly three fourths of that of Russia are classed as illiterate. More than

three fourths of the population of Mexico are also in this class.

Voting strength.[16] — It is impossible to determine the exact voting strength of the people within the United States because of the varying laws regarding suffrage. The number of those of voting age, that is, of those who are twenty-one years and over, represents a little more than one half of the total population of the country, or 56 per cent. Of this group, the men exceed the women in number by about two and a half million. Of the twenty-seven million men of voting age, nearly one fourth are foreign-born whites, and less than one half of these have become naturalized.

In nine of our largest cities, including New York and Chicago, the foreign-born whites constitute more than one half of the population of voting age. About one twelfth of the males of voting age are illiterate. Our laws are written in English, yet we find that more than one fifth of our foreign-born of voting age are unable even to speak English. When we consider that our government is based on the principle of universal suffrage, we can at once see the significance of these items.

Potential militia.[17] — In estimating the fighting strength of a country in case of war, about the only basis we have is the number of male citizens in the country from the age of eighteen to forty-four, inclusive. This is the age of militia duty under the laws of most of the states. The total number of males coming within this age is about twenty million, or a little more than one fifth of the total population of the country. The strength of our organized militia is about one hundred and twenty thousand. The peace strength of Germany was ordinarily about seven times this number.

Estimates of the population. — Although the federal census is taken but once in ten years, many other statistics are collected yearly. Our population is growing so rapidly that per capita averages for years other than the

census year would be of little value if we did not take into account this rate of growth. For this purpose, the Bureau of the Census has been directed by Congress to prepare estimates of the population for the intercensal periods. These estimates are based on the rate of growth throughout the preceding decade, together with such information as may be supplied by city officials and postmasters in regard to changes made in city boundaries, and estimates of the population of these annexed and detached territories.

QUESTIONS

1. What was the population of the United States at the time of the last census? How does this compare with that of some of the other principal countries?
2. Tell about the rate of increase of our population.
3. Tell about the density of our population. How does this compare with that of France and of England?
4. Where is the most of our population found as regards altitude?
5. How does the rainfall vary in the different sections of the country? How does this affect the population?
6. What is the mean annual temperature of the United States? What proportion of the people live in regions having a temperature near this average?
7. Explain " the center of population "; the " median point." Describe the movement of the center of population.
8. What races are found in the United States? In what numbers?
9. Give some of the principal facts in regard to the nativity of our population.
10. How does the proportion of the foreign-born vary in different parts of the United States?
11. What two marked tendencies are shown by our foreign-born?

12. How many more males than females are there in the United States? Why this excess? How does the ratio vary in different parts of the country?

13. About what proportion of our population attend school at some time during the year? What proportion of the various ages from six to twenty attend school?

14. What is the extent of illiteracy in this country? Where is it greatest? Why?

15. What is said of our voting strength? Of our potential militia?

16. What was the latest estimated population of the United States?

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CHAPTER III

IMMIGRATION

I. History and extent of immigration.
II. Earlier *versus* present immigration.
    1. The "old" and "new" by nationalities.
    2. Comparison of the "old" with the "new" type of immigrant.
III. Distribution of the immigrants.
    1. Tendency to congest already overcrowded sections.
    2. Associations to aid the immigrant.
IV. Causes of immigration.
V. Effects of immigration.
    1. Industrial.
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    3. Political.
VI. Restrictions on immigration.
    1. Résumé of present restrictions.
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    3. Arguments against further restriction.
    4. Arguments for further restriction.
VII. Oriental immigration.
    1. Chinese.
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    3. Hindu.

In the last chapter, the population of the United States as it was at the time of the last census was considered, and some of the more important facts in regard to the numbers, nationality, location, and character of that population were presented. This chapter deals more particularly with that large element which has come, and is coming, from other countries; the numbers who have come at successive periods, the countries from which they have come, the causes that

induced them to leave their homes, their influence upon social and economic conditions, and, finally, the various restrictive measures looking toward the more complete control of immigration.

History and extent of immigration. — As was stated in the last chapter, more than one seventh of our present population is foreign-born. This proportion has remained very nearly constant for several decades, notwithstanding the great increase in actual numbers within the past few years. The total immigration[1] into the United States from all countries during the past hundred years, or since foreigners first began coming to this country in large numbers about 1820, is about 33,630,104. For the years before 1820 no exact figures are obtainable, but it is estimated that the total number of arrivals from 1776 to 1820 was approximately 250,000. Beginning in the year 1820, with about 8000, the number increased very gradually, not reaching 100,000 in any year until 1842. The number then began to increase rapidly, going above 400,000 in 1854. Again there was a marked decline, which dropped as low as 72,000 in 1862. The increase since that time has been by successive waves, which fluctuate from year to year, but show a decided tendency toward a general increase for several years, and then a decrease for several years. These waves follow very closely the period of depression and prosperity within this country. During the ten years, 1905–14, the number greatly exceeded that of any other decade, averaging nearly a million a year. The greatest number was reached in 1907, when the total was 1,285,349. The lowest number since 1862 was 110,618 in 1918. For the last several years, about one third of the immigrants have returned to their own countries, after having worked here for a comparatively short time.[2]

The first people to come in large numbers were the Irish, beginning in the year 1848. This was due to the potato

famine in Ireland. During the first three decades, from 1820 to 1850, their number was in excess of that of any other nationality. Since then, the proportion of Irish has fallen off decidedly. The people from Germany were the next to come in large numbers. Between 1850 and 1860, their number exceeded that of the Irish, and it reached its highest point from 1880 to 1890, when 28 per cent of the total immigration for the decade was from Germany. The Scandinavian immigration was greatest also from 1880 to 1890, since which time the number of Scandinavians entering this country has declined. The immigration from the Netherlands, France, and Switzerland, though comparatively unimportant, has fluctuated but little throughout the last few decades. Immigration from Italy, Austria-Hungary, and Russia first became important about 1898, and since then the numbers from each of these latter countries have increased very rapidly.

Earlier *versus* present immigration. — *The "old" and the "new" by nationalities.* — Quite as great a change has taken place in the character of the recent immigration as in the extent, and this change in character has undoubtedly a greater social significance than the rise in numbers. It has been so marked that Jenks and Lauck [3] speak of the immigration before 1883 as the "old immigration" and of that since, as the "new immigration." The old immigration was almost exclusively from northwestern Europe, and included people from Great Britain, Ireland, Belgium, Switzerland, France, Germany, and the Scandinavian countries. The new immigration is from southern and eastern Europe, and includes the immigration from Austria-Hungary, Bulgaria, Greece, Italy, Montenegro, Poland, Portugal, Roumania, Russia, Servia, Spain, Syria, and Turkey.

Before 1883, these countries of northwestern Europe furnished some 95 per cent of the total number coming to this country. In 1914, or just before the outbreak of the

great war, these same countries furnished but 15 per cent of our entire immigration, while the countries from southern and eastern Europe gave us about 75 per cent. In other words, during this last year there have been practically five times as many of the new as of the old type of immigrant, and Italy alone has furnished almost one and one half times as many as did all of the northwestern countries taken together.

Comparison of the "old" with the "new" type of immigrant. —The real significance of this change from the old to the new immigration can be seen only by comparing the types of immigrants brought in by each. The people brought in by the old immigration more nearly resembled the people already here, since many of them came from the same countries as did our ancestors only a few generations earlier. This immigration was exclusively Celtic and Teutonic, whereas the new immigration is largely Latin and Slavic. The old had a similar language, similar religious beliefs, and much the same ideals of government as the Americans, and their customs, habits, and modes of thought were similar to those in this country. The old type of immigrant had made distinct progress toward self-government, while the new, which comes from the monarchic centers of Europe, has made but little progress toward any form of democratic government, and has but a slight conception of the principles underlying such a government.

Likewise in the industrial world the new immigrant has not made the advance that the old had made. His standard of living is lower, and he seems not so well qualified to become an employer as an employee. Among the old immigrants the number of professional and skilled laborers was more than double what it is among the new; while the proportion of common laborers is more than double in the new immigration what it was in the old. Those of the older type show a more decided tendency to remain here. The

number departing, for every one hundred admitted, is more than twice as great among the new as among the old immigrants.

Illiteracy [4] is very much greater among the peoples of the new immigration than among those of the old, it being 35.6 per cent for the new, as compared with 2.7 per cent among the old. The disproportion of the sexes is larger among the new. We find less than one and one half times as many men as women among those from Great Britain, France, Germany, and the Scandinavian countries, while among the Italians [5] we find more than three times as many men as women, and among the Russians nearly eight times as many. Such a disproportion as this does not tend to the highest type of family life.

The percentage of those becoming naturalized from northwestern Europe ranged from 43 per cent of those from Belgium, to 69 per cent from Germany. This is much higher than the per cent of immigrants becoming naturalized from southern and eastern Europe, the latter ranging from only 4.7 per cent for natives of Bulgaria and Servia, to 30 per cent for natives of Finland. From the foregoing analysis, we see that the problem of the assimilation of the immigrant is much more complex to-day than it has ever been before.

Distribution of the immigrants. [6] — *Tendency to congest already overcrowded sections.* — The tendency of immigrants to congregate in the already overcrowded sections of the country increases the complexity of our immigration problem. Could they be wisely distributed throughout the country, many of the evils growing out of the present excessive immigration would be remedied. The new immigrants, in particular, have shown themselves to be more clannish, and come less inclined to learn the language and customs of the country, and without the initiative or the money to take them into the more remote western or southern

sections. They show a decided tendency to gather in the North Atlantic and North Central states, and within the larger cities of these states. Of the immigrants coming here in 1913, more than three fifths located in the four states, Massachusetts, New York, Pennsylvania, and Illinois. This tendency to congregate in cities is indicated by the last census, which shows that nearly three fourths of all the foreign-born within the United States were living in urban communities.[7]

Their coming in such large numbers and settling in the communities where there are already great groups of foreign-born, increases the difficulty of assimilation. The newly arrived immigrant goes to these districts densely populated by his own countrymen, where he hears his own language, and where the customs and habits of his home prevail, and the process of Americanization is materially hindered.

Associations to aid the immigrants. — A number of associations, and also some of the state governments, have attempted to aid the new immigrant in various ways, to acquaint him with conditions here, and assist him in finding suitable locations. The Federal government established a Division of Information in the Bureau of Immigration in 1907. This is to furnish information concerning conditions in different sections of the country, so that the immigrant may more intelligently choose his location. Although these various associations have undoubtedly been of great value, they have been utterly unable to cope with the overwhelming numbers that have come from year to year, or to compete with the influence exerted by relatives and friends who are already located here. It is estimated that about 97 per cent of the immigrants have decided upon their destinations before reaching this country.[8]

Causes of immigration.[9] [10] [11] — The causes which have led some thirty millions of people to seek our shores have been many and varied. Although varying factors have entered

in at different times, the great underlying cause of a large proportion of the immigration has been the desire on the part of the immigrants to better their economic condition. One evidence of this is the remarkable way that the line showing the decrease and increase in the number of immigrants follows the line showing the periods of economic depression and economic prosperity within the country.

Economic distress in the home countries has sent many immigrants to America. At the time of the potato famine in Ireland, between 1847 and 1854, a great wave of Irish immigration swept over to America, bringing nearly 1,200,000 people. A large number of Germans who came here about the year 1853 came because of the economic distress in their own country. Recently there have been few violent or lasting periods of want in the European countries, hence this cause has not been so important as it was formerly.

Closely connected with this, however, is the low money wage prevalent in southern and eastern Europe. The peasants there are not so prosperous as are our farmers, and a crop failure means semi-starvation. Emigration comes as a welcome release. Their standard of living is not high, and they can live much better on the higher wages paid in the United States, even though it does cost relatively more to live. Land in Europe is not easily acquired, and Europeans have been greatly attracted by the vast areas of uncultivated land to be had in the United States almost for the asking.

In early times, people left Europe for America in order to escape political and religious persecution. This was the reason in the first place for the colonization of the United States, and until the present time it has not ceased to be of importance. Roman Catholics, Jews, Quakers, Scotch-Irish, Russians, and Poles have at different times come to this country as a refuge. Many Russian-Jews have fled to America to escape the persecutions of the Russian authorities.

The desire to evade a long period of service in the armies of their countries has led many strong European youths to spend the years of their greatest power in America. Many of the young men of these countries are unwilling to suffer the loss of their best years, even though it be in the service of their fatherland.

The ease of transportation has been an important factor in inducing immigration in recent years. Because they can make the ocean trip safely, and quickly, and cheaply, many immigrants, less self-reliant and hardy than their predecessors, have recently flocked to our shores. Steamship companies, anxious to secure passengers, have agents in the different countries, soliciting immigration, often unlawfully.

Until recent times, American employers, eager to increase the labor supply, have contracted with great numbers of men in the old countries, agreeing to advance them money to pay for their passage in return for their labor after reaching here. This system was evil in its results and is now carefully guarded against by law. As has been said by Professor Commons,[12] the desire to get cheap labor, to take the passenger fares, and to sell land, have probably brought more immigrants to this country than the hard conditions of Europe, Asia, and Africa have sent.

Letters from friends and relatives who have preceded them into the "land of great opportunity" have an especial charm, and appeal to those who are thinking of coming here. Statistics show that for the three years before the outbreak of the European war over a third of the immigrants had their passage paid wholly, or at least in part, by relatives and friends.[13] Also when the prosperous immigrant returns to his own country with glowing tales of American people and American money, and gives his countrymen apparent proof of his statements by his own lavishness, they, in turn, are stirred to try their fortunes in this wonderful land.

To the foregoing reasons may be added the attitude that

the United States has taken in the past. At various times the United States, and also certain states, have not only shown no hostility to the immigrant but have actually encouraged immigration.[14] The liberality of our land policy is an evidence of this. Our tariff policy, too, has tended to increase immigration in that it has increased the demand for unskilled labor.

Although each of these causes has been responsible for bringing in certain numbers of people, the economic reasons have probably been the underlying ones, and are at the present time the most important. In the opinion of the Immigration Commission,[15] the immigrants have come here, not so much to escape conditions that are intolerable in their own lands, as to look for improved economic conditions in this.

Effects of immigration. — *Industrial.* — The most serious phase of the whole problem of immigration is the effect that the introduction of such a large element of low grade, unskilled workers, of lower standards of life, must have in competition with the class of workers already established here. The new immigrants, in particular, in contrast with those of an earlier date, have been accustomed to lower standards in their home countries; they are less resourceful, and a larger proportion of them are unfamiliar with the English language. They are therefore handicapped in their efforts to make a living. It is more difficult to organize them into trade unions, hence we find them less able to effectively demand a higher wage. Their underbidding in the labor market tends to bring other classes down to their standards. While it is true that they do supply a very large number of unskilled workers, and that this cheap labor does encourage a greater division of labor and thus helps to develop industry,[16] it is also true that an abundance of cheap labor tends to retard inventions and the use of new machines and new processes in industry.

The competition has been keener in those industries em-

ploying large numbers of unskilled workers, and consequently has affected our unskilled laborers more than the skilled. Such a large number of unskilled, unorganized laborers, accustomed to live on much less than the American laborer, and ever ready to take a lower wage, is a constant handicap to the American wage earner in his struggle to improve his condition. A large number, having no family dependent upon them, and intending to remain here but a short time, can work under conditions which would be impossible for the American workingman; and everything which tends to lower the standard of life of a group of people affects the social conditions of the entire community.

Social. — The fact that for some years past nearly two thirds of all the immigrants have been males, has its social effect in those communities where immigrants tend to congregate in the largest numbers. This means that many of those coming here have not the stabilizing influence of family life. An increasing number, not looking forward to the establishing of homes here, make less effort to become familiar with our language and our institutions.

The Immigration Commission, after making an exhaustive study of the relation between immigration and crime, came to the conclusion that "no satisfactory evidence has yet been produced to show that immigration has resulted in an increase in crime disproportionate to the increase in adult population."[17] However, their statistics do indicate that the American-born children of immigrants exceed the children of native Americans in relative amount of crime. This is due largely to the fact that immigrants are found in great numbers in the cities, and the criminality of their children is a product of the congested city conditions. Proof is lent to this statement by the fact that a "majority of juvenile delinquents are found in the North Atlantic states, where immigrants form a larger proportion of the population than in any other section of the country."

The number of paupers in almshouses shows a larger proportion of foreign-born than of native whites. Also the statistics of charity organization societies would seem to indicate that a larger proportion of the foreign-born than of the native white apply for charity in one way or another. The recent more stringent immigration laws are excluding a much larger proportion of those who are likely to become public charges, and with the careful enforcement of the laws it is probable that the number assisted will be less than it has been before. The Immigration Commission, after a study of relief in forty-three of our principal cities, reached the conclusion "that only a very small percentage of the immigrants now arriving apply for relief."[18]

The percentage of foreign-born among the insane is somewhat greater than the percentage of native whites. Certain races show a greater tendency toward insanity than others. With the greater care that is now being taken against admitting any who show or have shown any evidences of insanity, it is possible that this disproportion may be diminished.

We are thus unable to prove that the immigrant is increasing the number of criminals in the country, that he is adding greatly to the number of the insane, or that he is materially increasing the burden from the dependent classes. Nor have we any conclusive proof that the new immigrant is affecting these problems more seriously than the old. The most serious social phase of the new immigration is the increasing disproportion between the sexes, the extent to which the new immigration increases illiteracy, and the increasing difficulties of Americanizing such a very large number of so diverse peoples. The very fact of their numbers and of their diversity makes more difficult their social assimilation. This is increased because of their clannishness, which tends to keep them separate and distinct from the rest of the Americans, and to preserve their own language, customs, and ideals.

Another social effect, more particularly of the new immigration, is the widening of class distinctions. The introduction of a large number of low-grade industrial workers, without efficient organization, furnishes a class which is easily exploited by the American employer. They work long hours, and for low wages. As a result of this exploitation, we have the few exceedingly rich, and the many who are very poor. This tends to widen the social gap between the employer and the employee, and accentuates the class distinctions which have become so important a phase of modern industry.

Political. — There came to our shores in 1913 approximately 270,000 people, fourteen years of age and over, who could neither read nor write.[19] A very large proportion of these came from countries where ideals entirely different from those predominating here prevail in regard to government. Many of them had the duties of citizenship thrust upon them almost immediately. They have no conception of a democratic form of government. In this country the administration of the initiative, referendum, and recall, and the duty of electing representatives and officials, place on the immigrants responsibilities which they are not qualified to assume.

Legislation to-day is largely social legislation, and has to do with the bettering of social conditions. An effort is now being made to better the conditions for the workingman through such legislation as the " Minimum Wage " and other industrial measures; to lessen the evils resulting from child labor; and to carry out policies of conservation. Another important question now confronting us is that of enforcing prohibition. The presence in our population of such a large group with such dissimilar ideals, and with but the slightest understanding of actual conditions here, cannot but add to the complexity of each one of these problems, and help to defer their solution. It is not that the new immigrants are more corrupt than the native-born.[20] In

fact, some of the recent disclosures of corruption in our country, such as those made by Steffens in certain sections of Rhode Island and Ohio, show that the foreign-born were a comparatively minor element.

They do furnish large numbers who are easily controlled by the industrial and political boss. It is not that the foreigner sells his vote outright, but he is not qualified to vote intelligently on the questions, and because of his dependence upon some man versed in politics, skilled in winning confidences and in dispensing advice, he often becomes the tool of the ward politician. This is particularly true in our large cities, where we find so many of the foreign-born.

Another difficulty in getting combined action is the lack of a class consciousness. Where we have such a variety of elements all thrown in together, there are bound to be race antagonisms which prevent that close coöperation which is necessary to secure social results.

Restrictions on immigration. — *Résumé of present restrictions.* — Legislation affecting immigration[21] has been passing through successive stages of development for a period of nearly a hundred years. Through the early part of the century, the individual states had sole control of the question. The first national legislation was the law of 1819, and this was an attempt to better the conditions of travel for the steerage passengers. The first provision for the keeping of statistics was made at this time. For the next fifty years the agitation against immigration was kept up, and several associations were formed, and several movements, such as the "Native American" and the "Know-Nothing" were set on foot, primarily to oppose the coming of the foreigner to our shores. A number of the states passed restrictive legislation during this period, but these laws were later declared unconstitutional. The national legislation of 1862 was an Emergency Act passed during the war, to encourage immigration.

The first classes to be definitely excluded by national legislation were convicts and immoral women. This was in 1875, and marks the beginning of a series of restrictive acts. The first general immigration law, attempting definite control over immigration by the Federal government, was passed in 1882. This act levied a head tax of fifty cents on all aliens landing at the United States ports, and added to the other excluded classes, lunatics, idiots, and other persons likely to become public charges. About this time the various labor organizations began to protest vigorously against the increasing competition of the foreign laborer. As a result of their protests, Congress passed laws in 1885, and further amended and strengthened these in 1888, excluding contract laborers. Since that time — notably in 1891, 1903, 1907, 1910, and 1917 — other laws have been passed, all of them aiming to restrict immigration still further. The office of Superintendent of Immigration was created in 1891, and the head tax was raised successively from fifty cents to one dollar, to two dollars, and finally to five dollars, the amount at the present time. These laws have increased the number of inspectors, have made further provision for the detention of those suspected to be undesirable, and have increased the liabilities of the steamship companies bringing in undesirable aliens.

The act of March 4, 1913,[22] provides that the following classes of aliens shall be excluded from admission into the United States: idiots, imbeciles, feeble-minded, epileptics, insane persons, or persons who have been insane within five years previously or have had two or more attacks of insanity at any time previously; paupers, professional beggars, or persons likely to become public charges; persons afflicted with tuberculosis, or with a loathsome or dangerous contagious disease; persons who have been convicted of, or admit having committed, a felony or other crime or misdemeanor involving moral turpitude; polygamists, or persons who

admit their belief in the practice of polygamy; anarchists, or persons who advocate the overthrow of government by force or violence; persons entering the United States, or attempting to bring in other persons, for immoral purposes; contract laborers; persons assisted in coming by others, unless it be shown that such persons do not belong to the excluded classes, and that their ticket was not paid for by any corporation, association, society, municipality, or government; children under sixteen years of age unaccompanied by one or both parents (at the discretion of the Secretary of Labor).

The same law states that nothing in the act shall exclude, if otherwise admissible, persons convicted of an offense purely political, not involving moral turpitude; aliens in continuous transit through the United States to foreign territory; skilled labor, if labor of like kind unemployed cannot be found in this country; actors; artists; lecturers; singers; ministers; professors; persons belonging to any recognized learned profession, or persons employed strictly as domestic or personal servants.

Provision is made that all aliens brought to this country in violation of law, shall, if practicable, immediately be sent back to the country whence they came, on the vessel bringing them. The cost of the maintenance of such persons on land, as well as the expense of their return, is to be borne by the owners of the vessels on which they came. Should a person become a public charge from causes existing prior to his landing, he may be deported at any time within three years after the date of his entering this country, at the expense of the steamship company. During the year 1919, approximately 8,500 aliens were excluded under the provisions of the immigration law, and over three thousand aliens who were found to be here in violation of the law were deported. The immigration law of 1917 added the literacy test to the other restrictions. This act was amended in 1918

to exclude anarchists. The act of 1921 limited the total immigration of any nationality to 3% of the number of that nationality here at the time of the 1920 census.

Present demands for further restrictions.[24] — The agitation at the present time for further restriction is prompted by the desire to limit further the numbers of those coming here, more particularly the large number of those having lower standards of life, who, therefore, tend to come into keen competition with the American workingman. The principal suggestions now being made for further restrictions are: the exclusion of those unable to read and write in some language; the limitation of the number of immigrants entering from any country in any one year to 10 per cent of the people here from that country at the time of the preceding census; the exclusion of unskilled laborers unaccompanied by wives or families; a substantial amount of money required to be in the possession of the immigrant on his arrival; the material increase of the head tax.

The first suggestion, the literacy test, was incorporated in three bills, but one was vetoed by President Cleveland, one by President Taft, and the latest one by President Wilson, only to be passed over his veto. The principal argument for the literacy test is that it may be readily applied at the foreign ports before sailing, and that it would exclude a very large number from the more undesirable races. Those who oppose this test maintain that this would exclude many who might later make most desirable citizens, and that it would not reach some of the most undesirable classes such as criminals, anarchists and immoral persons. Practically all are agreed on the desirability of excluding those who are likely to become dependents, defectives, or delinquents, but there is great diversity of opinion regarding the admission of other classes.

Arguments against further restrictions. — The principal arguments against further restriction are that we still have great undeveloped resources in this country, in the development of which the immigrant can be effectively employed; and that we are rapidly growing as an industrial nation, and hence have a greater demand for more labor. The lower grade laborer from other countries will take the more poorly paid occupations which the American laborer does not want. His coming makes possible a greater division of labor, and this favors the most advantageous use of labor. The mingling with other races will bring in new blood, and will be racially advantageous. The new immigrant is more emotional, and has a keener appreciation for art and music, and so brings a most desirable attribute into our population. The intermingling of peoples of various standards and of different civilizations is broadening and mutually advantageous. If our civilization is more advanced, the many people from other countries who return in after years to their countries cannot help but take back with them new ideas, new customs, and new habits of thought. Granted that we are blessed in so many ways, is it not extremely selfish for us to exclude the foreigner from sharing in these benefits? Instead of being fearful of the immigrant coming in and lowering our standards, should we not rather welcome him to a share in our prosperity?

Arguments for further restrictions. — Although we have eliminated some of the most undesirable features of excessive immigration, foreigners are still coming in such overwhelming numbers as to make assimilation almost impossible. Such a large number, with lower standards of living, must necessarily lower the standard of living of the American workingman. A large amount of cheap labor tends to retard the development of new machinery and new processes in industry. Such great numbers, and such diverse peoples, add much to the complexity of our present-day

social and political problems. Immigration reduces the native birth rate, while at the same time we have no evidence that the large emigration decreases the population in the congested portions of the old world. It introduces a large number who are unacquainted with our political and social ideals. It increases the amount of unorganized labor and so weakens the effectiveness of labor unions. The many immigrants tend to widen the gap between the rich and the poor, and thus to make more marked the class distinctions. We have had greater opportunities and have made greater advance along certain lines, notably in the development of democratic institutions, and in moral and religious ideals. May we not prove to be more helpful to other peoples by jealously guarding American institutions and American ideals, and thus serve as a model to the oppressed of other lands? Would not the ultimate benefits to these people be greater this way, than by permitting the few to come here and enjoy our prosperity for the time being, with the probable result of checking our advance, if not of lowering our standards and our ideals to those of the peoples of southern and eastern Europe?

Oriental immigration.[25] — All the arguments against immigration apply with increased force against oriental immigration. The orientals not only have lower standards of living, but they also so materially differ from the American people in language, religion, and customs, as to constitute an entirely new problem. While many of the European races present problems of assimilation, the oriental has such different racial characteristics, as to be quite impossible of assimilation. The fear is that should we permit the Asiatics to come here as freely as we permit other races, we would soon have on our hands a Japanese problem and a Chinese problem, quite as serious as our present-day Negro problem.

The *Chinese* began coming to this country about the time of the rush to California for gold, in the early fifties. A

number of them engaged in gold mining, others in railway construction work, gardening, laundering, and domestic service. To-day a number are found in agriculture, in the salmon canneries, in laundries; and as small merchants and restaurant keepers. They are becoming steadily a less important factor in industry because of their decreasing numbers, and also because of their being crowded out of some of their former occupations by the Japanese. The number of Chinese in the country increased very rapidly up to the time of the Chinese Exclusion Act in 1882. It is estimated that at that time there were 130,000 here. Since this act went into effect, the number has decreased quite as rapidly, until now there are about 61,000. The Chinese Exclusion Act of 1882 was the most radically restrictive act that Congress has ever passed. This excluded all Chinese laborers. The only classes exempted from these restrictions are teachers, students, travelers, merchants, the wives and minor children of these; officials of the Chinese government together with their servants; Chinese living here, who may be granted certificates entitling them to return to the United States; and Chinese who were born in this country.

The *Japanese* did not attempt coming here to any great extent until about 1898. In 1890 there were only about 2000. The number had increased to 24,000 by 1900, and to 111,025 in 1920. This number is nearly double the number of Chinese in the country. Many Japanese have engaged in various agricultural pursuits. Some are employed as section hands on the railways, while others work in the canneries, in the lumber mills and logging camps, and as servants.

Although formerly the attitude was more friendly toward the Japanese than the Chinese, since they have been coming in greater numbers, this kindly attitude, or at least this attitude of indifference toward the Japanese, has been turning to one of hostility. In the western sections, where

both the Chinese and the Japanese are found in the greatest numbers, it is felt that the Chinese are more trustworthy in keeping their contracts, and in doing their work with care; while the Japanese are much more aggressive, are more inclined to push themselves forward as regards wages or social position, and show a much stronger inclination to become land owners and proprietors. At the present time, the race antagonism is considerably more bitter against the Japanese than against the Chinese, and has caused serious race conflicts, especially in California.

The Japanese laborers are now excluded from coming to the United States through an understanding with the government of Japan that passports to laborers shall not be granted. Also, by the act of 1907, the President was given authority to deny admission to this country to foreign laborers who had been granted a passport to some other country if their coming here would be to the detriment of labor conditions.

Although the number of *Hindus* [26] in this country is not yet sufficiently great to cause us serious alarm, it is increasing. These people are generally considered less desirable than the Chinese or Japanese, and because of the troubles that are arising with these other races, there is more of an inclination to work against the possibilities of a Hindu problem by restricting their coming before they immigrate to any great extent. It is estimated that there are five thousand Hindus in the United States at the present time. The percentage of illiteracy is greater among the Hindus than in any other immigrant race, and their standard of living is lower. They are more caste-ridden, mingle less with other people than do any other races, and are found almost exclusively in the ranks of the lowest grade of unskilled laborers.

QUESTIONS

1. What has been the total immigration into the United States? Give a brief summary of immigration.
2. At what periods did the several principal nationalities come in large numbers?
3. What is meant by the "old" and the "new" immigration?
4. Compare the "old" with the "new" type of immigrant and explain the real significance of this change.
5. In the distribution of immigrants what tendency is shown? What significance has this tendency?
6. What is being done to aid the immigrant?
7. What have been the principal causes of our large immigration?
8. What have been the industrial effects of immigration? The principal social effects?
9. This large number of immigrants has what effect on our political life?
10. What restrictions have been placed upon immigration?
11. Which were the first classes to be restricted? When?
12. What are the principal demands at the present time for further restrictions?
13. Summarize the arguments for and against further restrictions.
14. What new phase of the problem is presented by oriental immigration?
15. Tell about Chinese immigration. Japanese. Hindu.

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CHAPTER IV

CHILD LABOR

I. Introduction.
II. History of child labor.
    1. In England.
    2. In the United States.
III. Extent of child labor in the United States.
IV. Causes of child labor.
    1. Poverty.
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    1. Health.
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VI. Prevention of child labor.
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        (*a*) Direct.
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        (*c*) Proposed minimum provisions of a good child labor law.
VII. Child idleness.

Introduction. — A few decades ago, nearly all of the work that was done by children was done in and about the home, and by children working with their parents. Where home conditions were satisfactory, such labor was not necessarily harmful to the child or to society. In this way many children not only learned how to do a great many things, but also

formed habits of industry and of application. As industry has been taken out of the homes and centered in factory, mill, and mine, a great change has taken place in the character of child labor. Instead of a helper and learner, the child has now become a wage-earner. Instead of working with and for the parent, the child now works for a stranger, who too often is but little concerned in his welfare, and is primarily interested in the profits to be made from his labor. As a result of these changing conditions, we now have nearly two million children engaged in the various industries in the United States.

As the children are thus brought into the industrial life they are young, immature, and have but little power of resistance. Lined up against them are the great powerful industrial concerns, greedy for gain, and keenly athirst for every unit of labor at the cheapest possible price. Many of these children are employed for long hours, and under conditions which are a serious menace to their physical and moral well-being.

History of child labor. — *In England.*[1] [2] — A little more than a century ago, Sir Robert Peel and some of the other great humanitarian leaders in England became aroused to the terrible conditions under which children were employed, particularly in the cotton factories. Such factories had but recently been established, and as they relied mainly upon water power they were located along streams, often quite remote from the more populous centers. The new mechanical inventions of this period made possible the employment of young children, and to secure such labor the factory owners went to the orphan asylums. Large numbers of orphans were "bound out" to the employers for a period of years. These pauper apprentices, some of them not more than five or six years of age, were housed in great barrack-like buildings, were often compelled to work twelve, fourteen, and even sixteen hours a day, underfed and underclothed, and in

Courtesy National Child Labor Committee

AT WORK IN THE COTTON MILLS.

factories where little attention was given either to their health or to their morals. Accidents were numerous and the ranks of these puny laborers were decimated by disease.

Such conditions as these eventually attracted public notice. The Board of Health of Manchester in 1796 called attention to the effect upon the children of unhealthful conditions, night work, and long hours, and also to the effect that a continuance of such exploitation of childhood must have upon life and industry in future years. After considerable agitation the first legislation looking to the protection of the child worker was passed. This first factory act was passed in 1802. Its aim was to protect the health and the morals of the pauper children in the cotton factories. It prohibited night work, and limited the hours of labor to twelve per day. Although the law was of little effect, because of inadequate provisions for its enforcement, it is of importance as marking the beginning of a series of factory acts extending down through the century.

After some years of agitation in which Robert Owen, himself a mill owner and employer of children, took a leading part, a second factory act was passed in 1819. Like the first act this one applied only to the cotton mills, but its provisions applied not only to the pauper apprentice but to other children as well. Children under nine years of age were prohibited from working in these mills, and children under sixteen were not to be employed more than twelve hours per day. The next important legislation was in 1833, when these provisions were extended to all textile mills. The hours of labor of children from nine to thirteen years of age were limited to eight, and of children from thirteen to eighteen years of age to twelve hours a day. An important new provision of this law was that providing for factory inspection with the power to enforce the laws.

Shortly after this, attention was called to the wretched conditions under which women and children were working in

the underground mines. A report by a committee in 1842 showed that not infrequently children began working in the mines at the early age of five. As a result of the disclosures made, a law was passed prohibiting the employment of women and children in the underground mines. The Seventh Earl of Shaftesbury, known as "The Workingman's Friend," was one of those most instrumental in making these disclosures and in securing legislation in the interest of the workers. He "made numerous personal investigations of factories and factory life, and his revelations caused all England to shudder." In 1844, a half-time system for children was enacted. This restricted the labor of children under thirteen years of age to half time; and in 1848 the work of all children under eighteen years of age was limited to a working day of ten hours.[3]

During the latter half of the century various laws were passed, gradually limiting the age of child workers, and bettering the conditions under which they could be employed. Laws were passed limiting the hours of labor, providing a minimum age and a minimum amount of schooling, requiring that dangerous machinery be properly guarded, and requiring better sanitary conditions in the factories.

In the United States.[4] — Child labor did not become an acute problem in the United States until some years later than it did in England. The factory system did not develop in this country as early as it did there, and consequently there was not the demand for the factory child laborer that there was in England. Nor was there the large number of pauper children here readily available for such work that there was in England. The mines also were not developed until some time later than in England, and then women and children were not employed in them as they were there. At the beginning of the century we were primarily an agricultural people; and in the slower development of our factory system we were able to profit by the experiences of England,

and thus to protect ourselves against some of the evils which accompanied the introduction of the system in that country.

By the end of the first quarter of the past century, however, people began to awaken to the possible dangers to the children of beginning work in the factories at too early an age. A committee of the state legislature of Massachusetts[5] in 1825 investigated some of the larger factories and reported finding over nine hundred children under sixteen years of age, most of them working from twelve to thirteen hours a day. During the next fifty years, as the textile industries were developed, an increasing number of children was employed in the factories. By 1870 the number of children from ten to fifteen years of age employed in the manufacturing establishments alone had passed the one hundred thousand mark, while the total number engaged in gainful occupations exceeded 700,000. From that time down to the present there has been a constant increase in the number of children employed, although owing to the gradual extension of restrictive legislation, the number in proportion to the total number of wage-earners is beginning to show a slight decrease.

The first legislation in the United States looking particularly to the care of the child laborers was enacted in Massachusetts in 1836.[1] This was very limited in character and referred merely to the amount of instruction that the children should receive who were employed in the manufacturing establishments. Eight years later, the same state limited the number of hours that children under twelve years of age could be employed to ten per day. Ten years later, in 1852, Ohio passed her first child labor law, to be followed some twenty-five years later by Illinois and Wisconsin with similar laws. The first really comprehensive child labor laws were the acts passed by Massachusetts in 1866 and 1867. These acts prohibited the employment of children under ten years of age in manufacturing establishments, limited the hours of those under fifteen to ten per day, and

further provided that all wage-earning children from ten to fifteen years of age should have at least three months' schooling each year. Another very important feature of this act was the provision for factory inspectors who should make regular reports to the governor, and the providing of penalties for any violations of the acts, two very necessary adjuncts to any effective labor legislation. Other states have gradually taken up the question of looking after the welfare of their child workers, until now every state has at least some restriction on the employment of children.[6]

Extent of child labor in the United States. — There were about two million child laborers in the United States in 1910. This means that more than one out of every six children from ten to fifteen years of age were engaged in some form of gainful work. Of this total number, nearly one half were under fourteen years of age. Although there is no state that has no child labor, the amount varies greatly in the different states. In four — Rhode Island, Connecticut, New York, and Massachusetts — less than one per cent of the children from ten to thirteen years of age were found to be at work, while in some of the Southern states — Mississippi, Alabama, and South Carolina — nearly one half of all the children of this age were classed as wage-earners.[8]

Of the total number of children employed, nearly three fourths are engaged in some form of agricultural work, while a little more than one fourth are to be found in other industries.[9] Of this latter number, about 18,000 are found in the mines and quarries, and 80,000 are found in the textile industries. The danger in child labor is often not recognized because of the large proportion engaged in agriculture, which is considered one of the more healthful occupations. Under this heading, however, are included the children found working in the cranberry bogs, in the berry patches and vegetable gardens, and also in the canneries. Children employed in this kind of work often labor under conditions

which are worse than those found in the factories. Some of the school principals in Philadelphia, from which city great numbers of children migrate to the fruit and vegetable districts to aid in gathering the crops, have testified that "the children who returned from the country after the berry picking and canning season were in a most deplorable condition, morally, physically, and intellectually, due to improper food, poor housing, and want of supervision." [10]

Causes of child labor. — *Poverty.* — Poverty resulting from inability, indifference, laziness, or the shirking of responsibility by the head of the household, has brought responsibility prematurely upon that household's younger members. This lack of those things which are necessary to the sustaining of life, of those things which make boys and girls happy at home, or at least decently fed and clothed, accounts for a large number of the child laborers in the United States to-day. Where the family is in extreme poverty, where the wages of the head of the house can supply but the barest necessities of life, it is a great temptation to add to these meager earnings even the few cents a child can earn in a day.

However, poverty is often the excuse for, rather than the cause of, child labor. Some of the most pathetic statements regarding the dependence of the poor widow upon the earnings of children have been made by those employers who hope to profit by the exploiting of such labor. Careful investigations have been made of a large number of cases where it was maintained that the families could not do without the labor of their children, and in three fourths of all the cases investigated, it was found that there was no real need for such labor.[11]

Policies of employers. — "The origin of child labor grew out of the sordid desire of employers to secure labor at the lowest possible cost regardless of the law of nature or of man." [12] Certain employers seem to have but the one policy, anything for gain. Children work cheaply; they

have no unions and thus are not able to bargain advantageously for their labor; and their work is seemingly very profitable to an employer. The president of the United Textile Workers has said that child labor is employed simply because it is cheap and unresisting.[13]

The factories are often owned by great corporations, the stockholders of which do not know who is employed, or the conditions under which the laborers work. The stockholder's immediate concern is dividends, and that overseer can demand the highest salary who can secure the greatest profits. The financial return, rather than the welfare of the workers, is his greatest concern. Some employers are well aware of these conditions, but are so blinded by their eager desire for high profits that these wrongs to childhood make no appeal to them. Other employers permit these wrongs to continue because of their indifference or their criminal negligence.

Newer methods in industry. — With the introduction of the factory system, where it became necessary for large numbers of families to gather in close proximity to the mill or factory, it was soon recognized that in the children of these families was an available labor supply which could be used with profit. In order to utilize this cheaper labor, special energy was directed to the invention of such machinery as could be tended by mere children, machinery which had only to be stopped and started, or fed and relieved of its burden. Where children have been prohibited from employment, energy has been directed to the invention of such machines as will do the work formerly done by the child.

The division of labor has divided all industries into many processes, the simpler of which can be done by children. The growth of the market gardening business and the removal of the canning industry from the home to the factory have given rise to a great demand for child labor to gather berries, fruits, and vegetables, and for work in the canneries.

Conditions in schools. — The compulsory education laws of our country are inadequate. They must be so, or we would not have the enormous number of nearly two million child laborers in the United States. There are several of our states which have no compulsory school attendance laws.[14] In Maine the children are required to attend school until the age of fifteen, and there only 1.7 per cent of those between ten and thirteen are at work. Compare this state with Mississippi, for instance, where 47 per cent of the children between ten and thirteen are at work.[8] Too often school boards are careless in enforcing laws which do exist, permitting children to drop their work even though there may be little or no excuse for so doing.

Through some defect in the school system, the studies given between the tenth and thirteenth years seem to fail to hold the interest and to grip the attention of the boys and girls. School work and routine begin to look impractical to them, and discipline grows irksome. Altogether too frequently the child who feels that he has some petty complaint is permitted by the parent simply to drop his school work, even though there is but little possibility of his ever again taking it up.

Because of the crowded conditions in the schools in certain localities, the teachers have so many pupils to look after that they have little time to spend on individual cases. From lack of individual attention and guidance many a child has fallen behind and become discouraged, and has turned to the working world merely to escape the petty school trials.

There are many children defective in sight, hearing, or in some other respect. These are easily discouraged, especially as many of them become the victims of inexperienced teachers or teachers who cannot understand them. Backward children as a rule leave school very early to fill unimportant, ill-paid positions in the factory and commercial world.

Public indifference. — Undoubtedly one of the greatest causes of child labor is the indifference on the part of the public to conditions as they actually exist, and to the effect that child labor must have upon future generations. If the children of our land are oppressed and made to work when they are too young, and under bad conditions, the fault may be laid at the door of every one of us. The public is responsible, but it is not awake to its responsibility. Avarice and greed have dulled the consciences, not only of our general public, but often of our legislators as well. It is necessary that every man and woman in the United States shall not only learn of the conditions prevailing, but shall also make a determined effort to eliminate these conditions. Good child labor laws must be demanded and enforced by an awakened and interested public.

Effects of child labor. — The price of child labor is high, to the child, to industry, and to society.[15] Its effects may well be grouped under the headings of the cost of child labor to health, literacy, wages, efficiency, home and morals, and citizenship.

Health. — That child labor ruins the health of children, and undermines the strength of a nation, is a self-evident fact. The boy or girl, who, from the age of ten years on, has tended a machine, sitting or standing in one position, performing only some muscular act with exacting routine, and who has done this for ten and eleven hours day after day, — that boy or girl becomes stunted, maimed, deadened in body and mind. As a rule, the manufacturers whose policy it is to employ children, are those who are indifferent regarding the sanitary conditions which surround the worker, and thus we find that the disease rate is high among child workers. The breaker boy, working for long hours in an atmosphere heavily laden with coal dust, and the child toiling day by day in the lint and dust-filled atmosphere of the cotton mill, are particularly susceptible

to diseases of the lungs. Bad air, filth, and muscular routine combine to wreck their lives.

In addition to the toll exacted from the health of these workers, we find that their liability to accident is very much greater than is that of the adult laborer. Investigations have revealed to us that in all occupations averaged together, children below sixteen are three times as liable to accident as are adults.[16] The child in the coal mine or in the factory is not old enough to realize his responsibilities, not well enough informed to understand all instructions, and not mature enough to be sure of himself when trusted with some tasks involving danger. Many child workers are maimed and crippled for life through some bit of carelessness, and that their negligence endangers not only themselves, but others, is evinced by the Cherry Mine disaster, where the " thoughtlessness of two fifteen-year old boys contributed to the loss of two hundred and fifty-nine lives."[17]

The haggard faces, the patient and weary air of these child workers, be they in store, factory, or mine, reveal to us, both what the tax of their work has been on their strength, and the dulled state of mind and body in which they perform their tasks. They are not strong and healthy as children should be, nor will they ever become so, for the chance for play is denied them, the boon of fresh air and sunshine is not theirs. Wearied, dulled, often deformed, old and decrepit before their time, these people pass on their weakened condition to their children, and the result is an enfeebled race, physically, intellectually, and morally.

Literacy. — The child who enters the industrial world at the age of 10 to 14 years, has not received enough education to make him capable of advancing far in any line of work he may undertake. There is just a faint possibility that he may have a chance to continue going to school after working hours, if he is strong enough and has ambition enough to do so. But this is where the difficulty shows itself. A child

who has worked ten or eleven hours in a day has neither time nor strength left to go to school. Tired mind and tired body make him forget any plan he may have had to do so, when he started work. Thus child labor produces illiterate men and women.

A striking parallelism is found between the states having the largest percentages of children at work, and the states having the largest percentages of illiterates. The three states — Mississippi, Alabama, and South Carolina — having the largest percentages of their children from ten to thirteen years of age at work, have more than four times the percentages of illiterates of New York and Massachusetts, the two states having the smallest percentages of child labor.[8] Sweat shop labor and cannery work interfere with the school attendance of children even younger than ten years to such an extent that those children engaged in these forms of labor are much retarded in their school work, with great difficulty ever advance in it, and easily become discouraged, — thus adding materially to the burden of illiteracy of our country.

Wages. — Repeated investigations have shown that the family wage is invariably the same, regardless of the number of the family who are wage-earners. That is, where the women and children of a family become wage-earners, the whole family earns on an average no more than the father would earn, were such conditions prevailing that he should be the only wage-earner of that particular group. Many instances have been found where, in the stress of competition, the women and children have taken the place of the man, who is supported in idleness from the products of the labor of the women and children.

Child labor, as cheap labor, invariably tends to bring down the wages of adults. This is well illustrated by a comparison of the wages in the cotton mills of Massachusetts with wages in the same industry in the South. "In Massachusetts,

where children under fourteen are not permitted to enter industry in competition with their fathers, the father's wage in the cotton mills advances steadily until he is 45 or 50, when he reaches his maximum wage of 18 cents an hour. In the South, on the other hand, where children of 10 and 12 are employed in the mills in competition with their fathers, the father reaches his maximum wage of 13 cents an hour when he is 25 years old. After that, his wage declines rapidly, until at 50, he is earning only 9 cents an hour."[18]

Efficiency. — The great cry of to-day is for efficiency, yet in no phase of our industrial life is efficiency sacrificed to a greater extent than in child labor. Starting to work at the age of ten or twelve, and merely repeating muscular acts, does not make a child more intelligent, and detracts from, rather than adds to, his ability as a productive worker. The child wage-earner misses that preparation which alone can make him efficient. The deadening effects on the child of long hours of monotonous toil, together with the loss of proper recreation and of manual and intellectual preparation, are serious handicaps to his industrial efficiency for the remainder of his life. The child of the mill and factory is not only subject to these weakening influences during the formative years of his life, but also is spending this period in mere routine work, and therefore reaches maturity with an utter lack of preparation for any place in the man's industrial field. Just to the extent that the individual is weakened, is the labor power of society lessened.

It has long been recognized that cheap labor is not necessarily the most economical labor; that not infrequently the poorly paid laborer needs more supervision, is more wasteful of material, and in the long run costs more than the more highly paid laborer. In many cases, employers who have been compelled by legislation to give up the employment of young children, have actually found that children over sixteen are well worth the higher wage, in that they

" do more work, better work, spoil less material, and have a sense of responsibility."[19] Also, in many instances where the employer claimed that certain processes could not be carried on without the labor of children, machinery has been invented which can do the work more quickly and more perfectly. Examples of these are found in the paper box factory machinery, the automatic bottle machine, and the slate-picking machine, each of which does some of the more unhealthful and routine work formerly done by children, and makes increased production possible.[20]

Home and morals. — Wherever children labor in mills, factories, or on the streets, there seems to be little home life. The very fact that child labor is permitted means the lowering of wages, to the end that nearly every member of the family must work in order to make a meager living. Family life is at a low ebb, and if there is a home at all, it becomes a mere eating and sleeping place. Fatigue and poverty forbid the normal enjoyment of the home to the factory boy or girl, while the restraints of a home grow irksome to the street worker. Where children are permitted to work, fathers and mothers become unnaturally anxious to have their children attain the age of ten or twelve in order that they may add to the family income their small weekly wage. Fathers and mothers even swear falsely to the ages of their children, that they may work at an earlier age. Child labor makes home life unnatural.

The overworked, tired, and discouraged boys and girls in the factory are the victims of conditions which bring about the stunting and shrinking of their moral senses. However, more than to these, do temptations come to the children who are classified as street workers, — that is, messengers, newsboys, bootblacks, and errand boys. Pool rooms, saloons, dance halls, and gambling dens, all these are on their daily routes, and come to constitute much of the boys' idea of life. Errand boys are sent to places where self-respecting

adults would hesitate to go. The result of this so-called street life is that many of these boys have perverted ideas of right and wrong, and are attracted by the glare of the excitement around them, or driven by a cruel need of mere necessities, into habits of deception, theft, and gambling. Frequent contact with all forms of crime, vice, and dissipation tends to blunt their moral sense. Long hours and excessive fatigue weaken their power of resistance, and they readily yield to the temptations that beset them on all sides. Records of the juvenile courts show that in a large proportion of the cases heard there, the crimes are committed by working children, and a great majority of them by those in street trades.[17] As Owen R. Lovejoy has said, this street work "is a blind alley, leaving the boy at the end of one or five years as undeveloped as when he began, having in the meantime absorbed his years, sapped his energy, blunted his sensibilities, and shattered his ideals." [21]

Citizenship. — It is inevitable that child workers, as they endure the hardships and dangers of their lot, should feel a vague resentment toward employers and prevailing conditions of employment. Class distinction is emphasized, and a real democracy cannot exist under these circumstances. Lack of education, and of a chance to develop, does not make for good citizenship. On May 31, 1914, according to the *New York Sun*, there were two thousand men in the Municipal Lodging House in that city. Of these, one thousand had left school before they were fourteen.[18] Premature work has given us the "child labor adult," whose usefulness is much impaired. The most undesirable of employees, he is most often without work. Bitter because he is idle, or because he can command but the smallest of wages, this man does not contribute much to the citizenship of our country. As one person has said, "There's a heap of difference between working and being worked." [22] The child labor adult feels that he has been worked, and that, in a country where

people are called free and equal. The strength of a nation lies in the quality of its citizens. Lord Macaulay summed up this subject when he said, " Intense labor, beginning too early in life, continued too long every day, stunting the growth of the mind, leaving no time for healthful exercise, no time for intellectual culture, must impair all those high qualities that have made our country great." [23]

The National Child Labor Committee has well summarized the " high cost of child labor " : [15]

1. It Costs the Child
   - Accidents and Disease.
   - Lack of Education.
   - Material and Spiritual Loss.
2. It Costs Industry
   - Waste of Products.
   - Less Profit in the Long Run.
   - Lower Efficiency of Child Labor Adults.
3. It Costs Society
   - Wrecked Human Beings.
   - Broken Homes.
   - Ignorant Citizens.
   - Possible Criminality.

Prevention of child labor. — *Investigation and education.* — Intelligent public opinion is very necessary before we can expect to secure wise legislation for the control of child labor. It is not only necessary that careful and extensive investigations be made regarding conditions as they actually exist, but also after securing this information it must be brought before the attention of all the people. Nor is it enough that they merely know the facts of child labor, but they must also be made to appreciate the serious consequences to the child, to industry, and to society generally, if something is not done toward its prevention. England, as we have seen, has been fighting this evil for more than a century,

Courtesy National Child Labor Committee

A Family of Wage-earners.

Courtesy National Child Labor Committee

In the Canneries.

and the United States, for a little more than half a century, but it is only within the past few years that we have taken hold of the problem vigorously, and have made determined efforts to check these abuses.

A number of the separate states have made studies of this question, and have published the results of their investigations. More recently the Federal government has recognized the importance of the subject, as a result of which we have the extensive information contained in the reports of the Industrial Commission, in the reports of the Bureau of the Census, and in a number of the special reports of the Bureau of Labor, including the published results of the investigation authorized by Congress into the condition of the women and child wage earners of our country. The Federal government further showed its concern over the welfare of the child by establishing the Federal Children's Bureau in 1912, whose duty is " solely to study and report upon conditions affecting the welfare of children." The publications of these bureaus have been most useful in spreading information throughout the country.

In addition to these, many private associations have shown an interest in this question by carrying on investigations of their own, and in extending this information to the public by means of platform, pulpit, and press. The labor unions have almost invariably been found aligned with those forces opposed to child labor. The American Association for Labor Legislation has been an active force in securing legislation for the protection of the child. Many organizations, such as the National Consumers' League, the Women's Clubs, the Y. M. and Y. W. C. A., and particularly the various churches, have been most instrumental in extending information regarding conditions, and in arousing sentiment against the evils of child labor.

Perhaps the most effective single organization working in the interests of the child laborer is the National Child

Labor Committee. This committee was organized in 1904. Its principal activities have been investigation, instigation and furtherance of legislation, publicity and educational work, and coöperation in making child labor laws effective. This committee has carried on investigations on its own behalf, and through the work of its staff photographer, has been able to present its findings in a most vivid and realistic way. Through the distribution of several million leaflets and other publications, it has given wide publicity to the facts regarding child labor. It has drafted bills, and has rendered most effective aid in the securing of legislation, through the state and Federal governments. It has sent its Child Labor Exhibit to many cities and has supplied charts, photographs, and pamphlets to many individuals and associations, in order to arouse interest in the problem. It has aided in the enforcement of the laws, and has supplemented and coöperated with the various state and local committees in all phases of the work.

Legislative measures. — Direct. — As a result of the agitation which has been carried on, every state in the Union has passed at least some legislation in the interests of its child workers. There is, however, a woeful lack of uniformity in existing laws, and no state has gone so far as is desirable in the way of protecting its children. Twenty-five states have prohibited child labor under fourteen years in mills and factories. Thirty-four states have forbidden night work to children under sixteen in mills and factories. Eighteen states limit the labor of children under sixteen to eight hours a day in mill and factory. Fourteen states have forbidden children under sixteen years to labor in mines and quarries. Each succeeding year shows a marked gain in the legislation in the interests of the child workers in a large number of the states.[24]

The first comprehensive attempt at Federal regulation of child labor was the Palmer-Owen Bill, drafted by the National

Child Labor Committee and introduced in Congress in January, 1914. It failed to pass this Congress but did pass the next as the Keating-Owen Bill. This bill attempted to restrict child labor by excluding from interstate commerce all goods produced in factories, mills, canneries, or workshops, where children under fourteen are employed at any time; goods produced in mines or quarries where children under sixteen are employed; and goods produced by children under sixteen working more than eight hours a day or working by night. Although this bill was declared unconstitutional in 1918, its essential provisions were secured through another bill which imposed a tax of 10% on profits from products entering interstate commerce produced in violation of these provisions.[16] Thus indirectly a national child labor law was secured.

Indirect. — In addition to the direct legislative measures on child labor, indirect measures are very essential. To prohibit children from working and yet not to require their attendance at school is utterly absurd; hence compulsory education laws must go hand in hand with, and be in harmony with, child labor laws.

Further restriction is secured in the several states by the establishment of a minimum standard for the wages of women and minors. About one half of the states are now trying some form of mothers' pensions to lessen the dependence of the family upon the wages of children. In the few cases where there has been found to be a real need of the wages of children, it has proved far more economical in the long run to alleviate this need through the grant of a small pension to the mother, than to permit the child to continue in industry, and thus to handicap his future earning capacity. The establishing of suitable playgrounds is also of importance in supplementing the child labor laws. One of the important reasons for taking the child from the factory and from the mine is to afford him time for play, and provision must

be made for the healthy development of this side of the child's activity.

No matter how good the laws on the statute books may be, they are of but little effect unless properly enforced. Many of the states have passed reasonably good laws, only to have them nullified by inadequate provisions for their enforcement. An adequate force of inspectors is most necessary in order to make any of these laws effective, and back of the inspector there must be strong vigorous administrative officers whose duty it is to enforce the laws.

The National Child Labor Committee suggests the following as the recognized *minimum provisions of a good child labor law:* [26]

1. A fourteen-year limit, at least, for all gainful occupations.
2. A higher age limit for mines, quarries, and other dangerous trades, and a twenty-one-year limit for night messengers.
3. An eight-hour day, and no night work for children over fourteen.
4. Requirement of work permits for children over fourteen.
5. Scientific inspection of factories and other places of employment to insure obedience to the law.

Child idleness. — Any consideration of child labor should not overlook child idleness. Since industry has been taken so largely out of the home, it is exceedingly difficult in many communities to find work suitable for the child. In many homes this is a greater problem than child labor. The earnings are not needed to supplement the family income, yet it is recognized that it is most harmful for the young person to have nothing to do — simply to drift along in idleness. In almost any community groups of children and of young people may be seen loafing about the street corners. There is a strong tendency for them to pick up the petty vices of the street, and it is but a step to the pool hall and the dance hall. It becomes increasingly difficult for such

young persons to overcome the habits of idleness thus formed, and to hold themselves to any line of work or study requiring steady, consistent application of either mental or physical powers.

An effort must be made to prevent this waste of time and this loss of energy. This may be done by providing opportunities for wholesome recreation for the young people through the extension of playgrounds, by permitting the use of school grounds and school gymnasia during vacation periods, by providing public bathhouses, and especially by employing a play expert, as many communities are now doing, to direct the recreational activities. Nor does all of this time need to be absorbed in mere play. Now that there are not the opportunities for helping about the home that there were formerly, there is no reason why the school day should not be lengthened, not necessarily by more extended study periods, but by extending the time devoted to industrial training and domestic science, and by varying this work with the study and play periods. Such use of idle time will partially compensate for the loss of old-fashioned home training that is so rapidly being lost in modern homes. It is likewise exceedingly illogical for our schoolhouses with their splendid equipment to be closed up three months of each year while at the same time large numbers of young people are restless and uneasy through not knowing what to do with themselves. Many of the boys and girls would be glad of the opportunity of using the industrial and manual training equipment of our schools for at least part of the time during the long summer vacations.

A number of the leading social workers of this country have recognized the growing importance of this problem and have organized the Playground and Recreation Association of America. This association has coöperated with a great many communities in their endeavor "to change leisure from a liability to an asset."

QUESTIONS

1. What changes have taken place in the character of child labor?
2. What were the conditions leading up to the first child labor legislation in England?
3. Trace the successive steps in child labor legislation in England.
4. Tell of the rise of the problem of child labor in the United States. How did conditions here differ from those in England?
5. Mention some of the more important child labor legislation in the United States.
6. How many children are employed as wage-earners in the United States? In what industries? How does the number vary in the different states?
7. What relation has poverty to child labor?
8. How may the policies of employers increase child labor?
9. In what ways have the newer methods in industry contributed to child labor?
10. The conditions in our schools have what bearing on child labor?
11. In what way may public indifference be said to be a cause of child labor?
12. What is said about the effect of child labor on health? Literacy? Wages? Efficiency? Home and morals? Citizenship?
13. Why should investigation and education precede child labor legislation?
14. Name some of the principal associations working along these lines.
15. Tell of the work of the National Child Labor Committee.
16. What legislation has already been passed directly in the interests of the child workers?
17. Mention some of the more important legislation indirectly affecting the children wage-earners.
18. State the minimum provisions of a good child labor law.

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CHAPTER V

WOMEN IN INDUSTRY

I. Rise of the problem in the United States.
II. Number of women employed.
III. Occupations open to women.
IV. Wages of women.
    1. Comparison of women's with men's wages.
    2. Inadequacy of women's wages.
    3. Effect of low wages.
    4. Reasons for low wages.
V. Competition of women with men.
VI. Legislation in behalf of working women.

The rise of the problem. —Women have always played an important part in industry. In fact, in the early history of most peoples the women are found carrying on the principal industrial activities, while the men are engaged in war, or in hunting and fishing. The many changes which have taken place in our economic life during the past century have brought about a readjustment of woman's place in industry. This readjustment has been accompanied by certain advantages, but along with these have come various dangers which have threatened the welfare of society. Many of the conditions affecting the employment of women are similar to those affecting the employment of children. Long hours of toil under unhealthful conditions are not only a menace to the health of the woman as they are to the child, but they have also quite as serious an effect on all society.

Down to the beginning of the past century, women were largely employed in the home. They were not employed as wage-earners, but were rather busied about their household

duties. With the changes of industry that came in about the beginning of the century, more and more of the work that was formerly done in the home was taken over by the factory. The period from 1815 to about 1830 saw many changes in our industrial life, the most important of which was the passing of the old household textile industries into the factory system. By the end of this period we have a well-defined group of women wage-earners as an integral part of our labor supply.

Woman's entrance into the wage-earning class was very gradual, and for several decades was limited to a comparatively few industries. As the number of woman workers has increased, the need of regulating their activities has arisen. The employment of large numbers of women tends to weaken the home. Young women who begin at an early age as wage-earners are deprived of their preparation for home-making, and often become dissatisfied and unwilling to settle down to the routine of a home. For a large number of married women to be employed means their absence from the home for the time that they are employed. This is more serious when there are children, because it not only prevents the mother from giving her best to the home, but also keeps her away from the children when they are in need of training and care.

Many of the industries which women have entered have proved a serious drain upon their health. Those occupations which require women to stand for long hours, to work in cramped positions, or in poorly ventilated rooms, tend to weaken their physical constitution, which inevitably means that a weaker generation will succeed them. And finally as women enter the industrial field they tend to lower the wages of the men.

It is because of these newer phases of woman's industry that society out of self-protection is concerned with her welfare, and is attempting to eliminate, or at least to lessen,

some of these evils which have followed her entrance into our economic life as a wage-earner.

Number of women employed. — There are about eleven million women in the United States engaged in some form of gainful occupation. This means that a little more than one fifth of all the wage-earners in the country are women (21%); also, that of all the women in the country ten years of age and over somewhat over one fifth are wage-earners (23%). For each of the past four decades, an increasingly large proportion of women have been listed as being engaged in gainful occupations. During the same four decades, the proportion of the total male population ten years of age and over who were gainfully employed increased from 78 per cent to 81 per cent; while the proportion of the female population so employed increased from 14 per cent to 23 per cent. Thus, not only is the proportion of women gainfully employed increasing rapidly, but it is increasing more rapidly than is the number of men so employed.[1]

This proportion varies greatly in the different sections of the United States.[2] It is particularly high in some of the manufacturing states of the East, such as Massachusetts and Rhode Island, where nearly one third of all the females ten years of age and over are engaged in some gainful occupation, and in some of the agricultural states of the South, such as Mississippi and South Carolina, where this proportion is nearly one half. In contrast with this, in the two mining states of Idaho and West Virginia, and in Kansas, only about one eighth of the women are classed as wage-earners. On the whole, the proportion in the North Central and the Mountain states is much less than it is in New England, the South Atlantic, and the Southern states.

Occupations open to women. — Not only has the number of women wage-earners increased very rapidly, but also the number of occupations which women enter has increased even more rapidly. When Harriet Martineau visited

America, in 1840, she reported that she found but seven employments open to women, — teaching, needlework, keeping boarders, working in cotton mills, typesetting, working in bookbinderies, and household service.[3] Although woman's activities were probably not quite as limited as this, they were very few in number. From that time to the present, woman has entered into many and varied occupations. In the 1910 census, of the four hundred and twenty-eight occupations listed women were found in three hundred and eighty-five. Of the one hundred and sixteen principal occupations, women had entered all except those of conductors, motormen, brakemen, firemen and engineers, soldiers and sailors, plumbers, policemen, and street laborers.[4]

The only occupation in which the women outnumbered the men was in domestic and personal service, where the proportion was a little more than two women to one man. In professional service, because of the large number of women teachers, there are about four women to every five men. About one third of all those in clerical occupations, and one sixth of all those engaged in manufacturing, are women. Of the persons engaged in transportation one out of twenty-five is a woman, while in mining industries only one in a thousand is a woman.[5]

Wages of women. — *Comparison of women's wages with men's wages.* — There are two important phases of women's wages to be considered: first, their relation to men's wages; and second, their inadequacy. There are but few occupations in the United States in which women receive the same wages as men for the same amount of work. In some of the more highly skilled professional services, and in a few of the occupations where " paying by piece " prevails, the wages are about equal. In many other occupations, the wages received by men are greatly in excess of those received by women. In view of all the evidence that has been collected, it is probably a reasonable statement to say that the adult

male wageworkers in the industries of that section of the United States lying east of the Rockies and north of the Mason and Dixon Line receive a total average annual wage of about 70% more than the average annual earnings of adult females in the same area.[6] According to the Pittsburgh Survey, of the laborers employed in the mills, the women received about one half as much as the unorganized men, and a third as much as the organized men in the same shops. A study of the meat-packing industry in Chicago showed that the women received from a dollar to a dollar and a quarter a day less than men for the same work.[7]

The *inadequacy of women's wage* is shown by practically every investigation that has been made of working conditions here in the United States. In fact almost every special study which has been made in different sections of the country has shown that women's wages tend to be far below the minimum cost of living. The 1918–19 wage investigations that were made by the Massachusetts Minimum Wage Commission showed that 89 per cent of the employees in the canning industry earned less than $9, and 98 per cent earned less than $11 per week. During the same period two Massachusetts wage boards set $12.50 as the very least on which a woman could live healthfully.[8] A recent investigation in Kansas City showed that one half of the wage earning girls earned not more than two thirds of the amount that the committee that made the investigation maintained was a living wage. In a recent study made in the District of Columbia it is stated that, "It seems evident from the figures presented that a substantial number of women employees in hotels, restaurants, hospitals, and apartment houses are receiving wages inadequate to supply them with the necessary cost of living and maintain them in health and protect their morals."[10] These and other investigations have shown that a very large proportion of the women wage-earners of the country are working for a wage considerably below what

is considered necessary to maintain a decent standard of living.[11]

Effect of low wages. — When we consider that more than one fifth of the women of the country are wage-earners, it is very evident that for a large proportion of these to be working at a wage less than sufficient to provide the common necessities of life cannot but have a serious effect upon society as a whole. The low wage invariably means living under conditions which are detrimental to health. Stringent economizing in the use of nourishing food, living in poor and unhealthful quarters, the lack of proper clothing, and of needed medical care, — all these tend to weaken the physical powers of the underpaid woman wage-earner. The young woman who must put in long hours every day earning the barest necessities of life has, moreover, but little opportunity for self-betterment.

Much has been said in regard to the relation between low wages and immorality. There are, however, probably but very few cases where low wages may be said to be the direct cause of immoral conduct, but they are undoubtedly a contributing factor in a great many instances. A wage which compels a girl to live in an adverse environment, and prevents her from satisfying the perfectly normal desire for wholesome pleasure, cannot but weaken her power of resistance, and this just at the time when temptations assail her most strongly.

Not only from the standpoint of the physical, mental, and moral welfare of the women wage-earners, but also from the standpoint of the welfare of society of the present and of the future, it is necessary that women be protected from the long working day, and from conditions which are a menace to health and morals; also that they shall be given a wage that will permit them to maintain a decent and reasonable standard of living.

Reasons for low wages paid women.[12] [13] — Economic condi-

tions rather than ethical considerations are responsible for the low wages paid women.

1. Woman is a comparatively new factor in the industrial field, and in the process of readjustment the supply of her labor has been in excess of the demand for it.

2. There are many occupations, such as those connected with transportation and mining, which women are physically unfitted to enter. Not being so strong as men, they lose more time because of sickness; also now that an increasingly large number of married women are entering industry as wage-earners, maternity is becoming of increasing importance as a cause of low wages. Since the number of occupations in which great numbers of women are found is comparatively limited, the competition for work in these occupations is increased.

3. It is more difficult for women to move about from place to place, and thus take advantage of any opportunities for possible advancement. They are more frequently held back by home ties, are less venturesome than men, and because of their sex, they are prevented from going into many of the rougher sections of the country, or from entering the more hazardous occupations. Custom and tradition likewise not infrequently tend to limit the freedom of women in seeking new occupations. These again tend to increase the congestion in those occupations which women have entered.

4. A woman entering into an industry does not usually expect to remain in it all her life; therefore she does not feel justified in spending a great length of time in equipping herself for the highest possible efficiency in this industry. She does not have the same incentive for taking an interest in the work as does the man who expects to follow a given pursuit all his life, and hopes to become, himself, a manager or proprietor in the business.

5. Many of the women workers are not entirely dependent upon what they earn; consequently they are willing to work

at a low wage. Some live at home and do not have to pay for room and board out of their earnings. Others receive aid from relatives. Many farmers' wives and daughters do work sent out from the cities merely for the pin money they can earn. These women, in working for less than a living wage, little realize the hardship that they cause other workers who have to compete with them, and who must supply all their wants from their earnings.

6. Woman has not had the influence of coöperation and organization to back her in her demands for a higher wage. It has been primarily through organization that man has been able to demand higher wages and better working conditions. Woman, being new in the industrial field, has not had the benefits of such organization to the extent that man has. Women do not remain in industry so long as men; many of the occupations in which they are engaged in large numbers are of such character as to make it very difficult to form unions; and because they do not expect to remain as wage-earners, they have not as strong incentives to organize as have the men.

7. It is only recently that woman has become a political factor. She has been under subjection so long, has so long been "dependent on the influence of men generally too selfish to be of any practical benefit to her," that it must take time for her to receive justice and recognition as a wage-earner. As woman advances in power in the political life, it is by many expected that she will make more effective her demands for higher wages and better conditions in the industrial life.

Competition of women with men. — It is difficult to determine to just what extent women's labor enters into competition with men's labor. There are undoubtedly some occupations, such as bookkeeping, stenography, and clerking, in which there has been a tendency for women to take the place of men. In certain localities, as in some of the factory

districts, because of the excessive demand for women's labor, man has frequently been supplanted, and we find the abnormal condition of the man caring for the home or remaining in idleness while the woman labors in the factory as the breadwinner of the family. It seems more probable that women are taking the place of children in many industries; that they are entering new industries which are being developed under changing conditions; and that large numbers of them have merely followed into the factory and mill those industries which were formerly carried on in the home. Although woman has taken the place of man in certain occupations, many new lines of activity have been opened up to man as the result of new inventions and new methods; so there seems to be little need of fear that woman will supplant man to any serious extent in the industrial field.

A more real danger is that such a large number of women entering the class of wage-earners may lower the general level of wages, or particularly the wages of the family. Much of the work that women do is of a routine character, and such as does not require a great amount of preparation, and because of their willingness to work for a lower wage they tend to lower the plane of competition. The fact that women's wages are lower than men's in so many occupations means an underbidding in the labor market. This makes it more difficult for men to maintain their higher wage, particularly in those fields in which competition is keenest. Again, as we have noted in connection with child labor, when the mother and children labor to contribute to the family income, there is always a tendency for the man's wage to be decreased proportionately, and for the family to receive no more than when the wife and mother was caring for the home, and the man was the sole breadwinner of the family.[14]

Legislation in behalf of working women. — Since women began to enter the industrial field in such large numbers, a great amount of legislation has been passed in the effort to

better the conditions of their employment. Where the legislation affecting children in industry has aimed primarily at keeping them out of industry, that affecting women has aimed rather at regulating the conditions under which their labor is carried on. Most of the legislation has been directed toward shortening the hours of labor, eliminating night work, increasing wages, and bettering the conditions of employment.

Realizing that the long working day must necessarily have a serious effect on the woman worker, a number of states have passed laws limiting the hours per day which she shall be permitted to work. In some of the states this number of hours has been gradually reduced from eleven and ten hours to nine and eight hours, and more and more industries have been included under these limitations. The Federal government recently passed a law limiting the employment of women in various occupations in the District of Columbia to eight hours per day, and forty-eight per week. A number of the states have prohibited women from being employed at night work in the factories, or in any capacity where intoxicating liquors are handled. Many states have made provisions regarding the safeguarding of machinery, providing for good ventilation, and otherwise for good sanitary conditions, and specifying that seats shall be provided where possible so that women will not have to remain standing during long periods of time. Although many of the states are extremely slow, and still have but inadequate legislation, we see in those laws already enacted a tendency toward uniformity, toward a more comprehensive system of protective legislation, and toward the provision of a more efficient inspectorial force and a consequent more effective enforcement of the laws on the statute books.

The minimum wage laws passed by the several states are the most important of all the recent legislation affecting the woman wage-earner. The first state to pass such a law

was Massachusetts in 1912. The next year, eight more states passed similar legislation, and still other states provided for commissions to investigate the whole question of the minimum wage. A special emphasis was given to the demand for minimum wage laws as the result of many investigations of the wages of women. These investigations show that a very large number of the women wage-earners are receiving less than sufficient to supply them with the ordinary comforts of life, and that such deprivation is not only a menace to the individual, but also to the welfare of society as a whole. Brandeis, in his defense of the Oregon minimum wage law before the United States Supreme Court, says that the justification of prohibiting an employer from employing women at a wage which is less than a living wage lies in three facts. First, "Wages which are not sufficient to support women in health lead both to bad health and immorality; hence they are detrimental to the interests of the state." Second, "Women need protection against being led to work for inadequate wages." Third, "Adequate protection can be given to women only by way of refusing to allow them to work for less than living wages." [15]

An important principle underlying the theory of minimum wage is that every industry should be self-supporting; that is, that an industry which is not able to pay its laborers a decent living wage is socially undesirable, and hence that there is no justification for the continuance of such an industry.

Although the special feature of the minimum wage law, that of prohibiting the employing of women and minors at a wage less than a living wage, is practically the same in the different states, the scope of the application of the laws varies greatly. In some states the law applies only to specified industries, in others to all industries; in some states only to women, but in most states to women and to minors under eighteen or under twenty-one. In most states these laws

are administered by special commissions which have the power to determine the living wage. Three of the states give these commissions also the power to determine maximum hours and other conditions of labor; and six states give the commission power to enforce those parts of the law relating to wages.[16]

In Utah and Arkansas the law itself fixes the minimum rates. In the states where commissions have decided upon a minimum wage, they have generally agreed upon from ten to eighteen dollars per week.[16] Recent legislation in Kansas provides for an industrial welfare commission which shall establish for women and minors standards of wages, hours, and conditions of labor. The minimum wage commission act of 1919 in North Dakota confers these powers upon the Workmen's Compensation Bureau.

The constitutionality of the minimum wage law was recently upheld by the United States Supreme Court. Brandeis compares the law prohibiting the employing of a woman for a wage less than a living wage, with laws that prevent the employing of an engineer lacking the proper training from securing a license, or that prohibit the employment of an elevator tender under the age of eighteen or twenty-one.[15] His brief submitted before the United States Supreme Court on the Oregon case "was remarkable in that it said practically nothing about legal precedent, but gave extensive evidence as to the evil effects of low wages on health, morals, and efficiency." Extensive evidence was introduced showing that inadequate pay results in damages to the health through inadequate nourishment and lack of medical care; that "poorly paid women workers reduce their diet to the lowest possible point in order to provide, from a scanty wage, lodging and clothing"; and that "while underpayment may not be a primary cause of immorality, nevertheless, low wages are an important contributory factor."

QUESTIONS

1. What changes have taken place in the employment of women?
2. Why has the problem become so much more serious in recent times?
3. How many women in the United States are classed as wage-earners? This is what proportion of the total number of wage-earners?
4. How does this proportion vary in the different sections?
5. What occupations are open to women now as compared with a few decades ago?
6. How do women's wages compare with men's?
7. What is said regarding the inadequacy of women's wages?
8. What are the effects of low wages on the women? On society?
9. What reasons are given for the low wages paid women?
10. In what way does women's labor enter into competition with men's?
11. How does woman's entrance into the industrial field tend to lower the plane of competition?
12. Tell of some of the legislation which has been passed in the effort to better the conditions of employment of women.
13. Give a summary of the minimum wage legislation in the United States.
14. What is the justification of a minimum wage? What important principle is said to underlie this theory?
15. How does the application of the law vary in the different states?
16. What points were emphasized by Brandeis in his brief before the United States Supreme Court?

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CHAPTER VI

THE SWEATING SYSTEM

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Great changes have taken place within the last few years in industry. The development of the factory system has revolutionized not only methods of work, but also social conditions growing out of the new adjustments of labor and

capital. Many advantages have come along with the introduction of the system, and production has been increased many fold. The manufacturing industries have largely been taken from the home and centered in the factory. There were great economic gains in this because goods could be produced much more cheaply when made in large quantities. While most industries were being absorbed by the large factories, there were certain ones which did not yield so readily to these newer methods because of their characteristics. These industries, or certain parts of them, could be carried on more cheaply in the home or in the small workshop. This made possible the employment of the cheapest labor, including that of women and children. This phase of industry with the serious problems growing out of this method of employment, has been called the sweating system.

The system described. — The term *sweating system* has been used to describe "a condition of labor in which a maximum amount of work in a given time is performed for a minimum wage, and in which the ordinary rules of health and comfort are disregarded." [1] It will be seen from this definition that the essential factors of the system are low wages, long hours, and working under insanitary conditions.

Conditions leading to the sweating system. — The conditions which not only make possible, but encourage, the sweating system are, first, a crowded population in large cities; second, high rent; and, third, contract work.[2] The crowded population in the larger cities offers a large, available amount of labor which can be secured at a very low price. A large foreign population naturally industrious and thrifty, where the women and children and often the men have no regular work, is easily exploited by the sweater, and offers many victims to this grinding system. Where the rents are so extremely high as they are in localities where the sweating system operates, every bit of space must be most carefully utilized. It is not that the people like to live under such

crowded conditions, but they cannot afford the extra rooms, and are thus compelled to combine the kitchen, bedroom, living room, and workshop, in order to save rent. High rents also drive them into buildings which are far from sanitary, often compelling them to utilize a garret or a loft over a stable, even though these places may be a most serious menace to the health of the worker. Contract work, and even subcontracting, has always been associated with sweat shop work. It is through the contract that the work is parceled out to the various homes and shops.

The contractor, or sweater, is one who makes a special business of employing immigrants. The man best fitted to be a contractor, or sweater, is said to be " the man who is well acquainted with his neighbors, who is able to speak the languages of several classes of immigrants, who can easily persuade his neighbors or their wives and children to work for him, and in this way can obtain the cheapest help." [3] He has no connection with the business interests, but acts as a go-between for the manufacturer. His sphere is that of middleman or agent of the manufacturer, employed because of his ability to get cheap labor. He succeeds " because he lives among the poorest class of people, knows them personally, knows their circumstances, and can drive the hardest kind of a bargain." [3]

The sweat shop workers. — Because of the nature of the industries adapted to the sweating system, the system draws its largest number of workers from the more recently arrived of the immigrants. As the population in our large cities has become more congested, the successive elements in our immigration, with their constant lowering of standards of living, have offered a fertile field of exploitation for the sweater. Each succeeding wave of immigrants, with their lower standards, has displaced the former immigrants in these occupations. The tailor trade was first carried on largely by the English and Scotch. When the Irish began to

come in such large numbers in 1850, a number of these went into the clothing business, only to be succeeded later by the Germans. The great increase, together with the change in personnel of the immigrants in the eighties, gave an added impetus to this system. By the end of this decade the Jews had gained almost complete control of the clothing industry in New York. The Germans and Austrian Jews came first, and later the Russian and Polish Jews. More recently the Italians have entered this industry in large numbers. In many instances they have been able to underbid the Russian Jew, and their earnings "are reported as meager, their poverty extreme, and the conditions of work most wretched." [4] The sweated industries are characterized by their employment of a large proportion of female labor,[5] and most of the women employed are married.

As the work is carried on in the home, it has been impossible to determine the exact number of children who have been employed under these conditions, although all investigations have found many children employed. Not infrequently little ones of three and four years of age have been found in these crowded quarters, amid most unhealthful surroundings, helping their parents and thus adding a few cents a week to the family income. As the young girls reach maturity, they prefer the factory or store, as the work is less monotonous, the hours shorter, and the chance for mingling with other persons is increased.

Kinds of sweat shops. — The two most important kinds of sweat shops are the home and the small shop. One of the worst types of sweat shop labor is that carried on in the homes. In the crowded quarters, where we often find a large family occupying not more than one or two rooms, and at this often taking roomers and boarders, the work is carried on under almost indescribable conditions. An even more serious phase of the home work is the employment of a number of outsiders, who often live right with the family.

In such homes " unclean and unhealthful conditions are inevitable, and the close association of from six to fifteen persons in one small unventilated room renders the spread of contagion, as well as the danger of disease, a constant menace." [6]

The small shops which are often used as workrooms afford conditions but little better than those found in the homes. The shops are " sometimes connected with the living rooms of the sweater, . . . and are frequently in rear tenements or barns which have been condemned as unfit for human habitation." [6]

Another phase of the clothing industry, not so serious of itself, but serious because of its results, is the sending of packages of clothing out into the country, to be finished by farmers' wives and daughters. It is not that the conditions under which this work is carried on are bad, but these workers, not being dependent upon what they earn, but merely anxious for a little extra pin money and working only in their spare moments, can do the work at much less than a living wage. This sort of competition makes it extremely difficult for those in the city, who have no other sources of income, to make a living wage, and it tends to make the conditions in the sweat shops still worse.

Industries in which the system flourishes. — The clothing industry is by far the most important of all the sweated industries. This industry affords unusual opportunities for the sweater to ply his trade, in that many parts of this work can be sent to the home. While most of the newer industries can be carried on more advantageously through the use of a large amount of machinery, in the making of clothing a large amount of handwork is required, and the rest of the work requires no more capital than the small amount necessary to purchase a sewing machine. This makes it possible for the clothing maker to utilize the cheap labor of the poor people. Among the various other sweated industries, may

Courtesy National Child Labor Committee

WHY PAPER FLOWERS ARE CHEAP.

Courtesy National Child Labor Committee

HOME OR FACTORY?

be mentioned the making of artificial flowers, shelling nuts, stringing beads, putting buttons on cards, millinery work, sewing neckties, covering buttons, tying willow plumes, making false hair switches, tying cords in pencils for souvenir cards, and sometimes the manufacture of cigars and cigarettes.[7] It will be seen from this list, that many of these are adapted to the work of small children, and that aged people or semi-invalids can frequently assist somewhat in certain parts of the work, thus affording an added inducement to take work into the homes.

Causes. — There are two principal causes for the growth of the sweating system. One is the nature of the industry, and the other, the nature of the available labor supply.

Nature of the industry. — Because of the economic advantages of these small-scale productions, it has been very difficult either to eliminate or to control this work in the tenements. In the lines of work mentioned as particularly suitable for the sweat shop, the very fact that all grades of unskilled labor can be utilized has made this a difficult problem. On the one hand, there is keen competition, driving the employer to seek the cheapest possible labor; on the other, there are great numbers of laborers, helpless and entirely dependent upon their daily earnings. Another characteristic of most of these industries is that they are seasonal. There is a much greater demand for some of these products at certain seasons of the year. It is consequently advantageous to the employer to have a large amount of labor available when he needs it, which he will not have to carry on his payroll at other times. At such times, knowing where the labor can be secured, he simply takes the work in quantities to these homes and shops, where it is completed, and then returned to him. In this way he does not have to have large buildings or expensive machinery standing idle through the slack seasons, and his expense for rent thus falls upon the workers.

Nature of the available labor supply. — To fill just this demand, created by these particular industries, there is the large group of recently arrived immigrants of low competitive ability. These immigrants, in a new country, under entirely new conditions, are ignorant of our language and customs and of the possibilities of labor. Most of them are from the southern and eastern sections of Europe where the percentage of illiteracy is very great, and where but very few have had any industrial training. Their standards of life have been exceedingly low, and coming here as immigrants, the little capital they may have had has become largely exhausted, and they feel quite helpless. They have not yet learned the strength of bargaining power through coöperation. Their very ignorance and helplessness make them an easy prey to the shrewd contractor.

Evils of the sweating system. — *Long hours.* — An aroused public conscience through persistent effort has been able to regulate with a reasonable degree of success the hours of labor in factories. It is quite a different problem, however, to control the working hours in the home. In many of these shops it was found that the various members of the family, including the children, often worked from ten to sixteen hours, and even longer, a day. Because of the number of homes where such work is carried on, it has been very difficult to control working conditions. This control will be hard to effect until all manufacturing in tenements is prohibited by law. It has been difficult to secure proper legislation because of the great profits from the employment of cheap labor, and because of the large number anxious for employment regardless of wages or conditions.

Low wages. — The wages in all of the sweated industries are extremely low. This might be expected from the nature of the work and the class of laborers involved. It is an unskilled, cheap grade of labor, the laborers having little competitive ability. They work to supplement the family in-

come, and their wages are driven down to the barest possible cost of subsistence. Many examples have been given by investigators, of almost inconceivable prices; such as making roses and violets from three to eight cents a gross, making baby dresses at forty-five cents a dozen, and kimonos at four cents a dozen. Sorting and mounting buttons on cards is paid for at the rate of two cents for a dozen cards. Plaiting hat straw is done for ten cents the dozen yards. Willow plumes are tied at the rate of forty-one knots for a cent. In many of these tasks the mother, with perhaps two or three children assisting, would be able to earn from thirty to sixty cents a day by working from twelve to fifteen hours.[8]

Insanitary conditions. — The many investigations that have been made in regard to the sweat shops have been unanimous in speaking of the wretched condition within these places. They are invariably found in the most crowded quarters of the cities, in old tenement buildings utterly lacking in modern conveniences. Families of from three to five or more are found living in two- and three-room apartments, in small rooms poorly lighted and poorly ventilated, with walls and floors often out of repair. For entire families to work, cook, eat, and sleep under such conditions as these, working long hours and often seven days of the week, in close unventilated rooms, means a condition of labor that is not only a menace to health, but to all home life.

Spreading of disease. — As is to be expected, such places are found to be the breeding places of disease, and through the work that is done there on all kinds of garments, diseases may be spread to the most remote sections. Investigators have told us of finding garments piled on the bed of those suffering with diphtheria and smallpox; of costly coats being finished off by those in the last stages of consumption; and of children's garments being made in rooms where children were lying ill with scarlet fever and other contagious diseases. The material used in this tenement manufacture

is particularly adapted to the carrying of all kinds of germs, and even vermin have been discovered in sweat shop goods. Nor do the more costly garments escape this possibility. Many of the cheaper garments, such as overalls and workingmen's blouses, are now made almost exclusively in the factory, while some of the most expensive garments, requiring hand finishing, are sent to the sweat shops for completion. Not infrequently expensive suitings, overcoats, women's and children's clothing of the finest quality were found being finished in such quarters, and in direct contact with various diseases. "In Chicago a tailor was found working upon an evening coat of the finest quality, while five feet away from his table, his son lay dying of typhoid fever, and another tailor was found working on a good summer overcoat in the same room in which there was a patient dying of smallpox. In the latter case the coat was marked with the name of a custom tailor in Helena, Montana." [9] Not infrequently such a disease as smallpox has broken out in communities, and the local authorities have been quite unable to determine its source. Such diseases may have come directly through the wearing of clothing which had been finished in the sweat shop.

The "speeding-up" process. — Whenever we have an element in labor weak in bargaining power, the speeding-up process is carried to the greatest extreme. The sweater, in search of the cheapest possible labor, offers work at successively lower rates per piece, or per task, which the worker, in his or her helplessness, feels it necessary to accept for the small pittance that it adds to the family income. "Driving" is said to be the characteristic of every sweat shop. A good illustration of bargain driving is found in the constantly lowered prices for willowing ostrich feathers. Several years ago, "when the trade started, few knew how to willow, and 15 cents was paid for tying one set of knots (one inch). The following season more workers were in the

field, and the price went down to 13 cents an inch. Then it dropped to 11 cents, 9 cents, 7 cents, 5 cents, and finally the workers received but 3 cents an inch." [10] A similar driving down of wages is found in other kinds of sweated work, and has resulted in the speeding up of the workers until far more is required of them than what would constitute a normal day's work.

Subdivision of labor to a minute degree. — There is no other line of work which admits of such minute division of labor as do the sweated industries. The work is simple, and does not involve the use of complex machinery. Elderly people unable to do a full day's work, are able to do part of this work. Cripples and people on sick beds are found assisting in the various tasks. Little children three, four, and five years old are often found helping in the simple processes such as pulling out bastings, sorting and sewing buttons on cards, separating flower petals, and cutting out embroideries. Several children of seven years of age were found tying the knots in willow pluming.[11]

Lack of, and difficulty of, inspection.—Because of the scattered workrooms and homes, where the sweated industries are carried on, both in licensed and unlicensed tenements, it is almost impossible to secure any adequate inspection. The laws on the subject usually refer only to the manufacture of certain articles in licensed tenements. Thus the manufacture of articles not specifically mentioned in these laws is permitted without any inspection at all in any kind of a tenement. Then, again, there has been little money appropriated for inspection, and in New York where the law provides for two inspections yearly of those tenements licensed for manufacturing, there is, in fact, only one regular inspection. These inspections coming at such long intervals and covering only certain industries have proved very inadequate, and are extremely unsatisfactory to those who are interested in the bettering of sweat shop conditions.[12]

Individual and social effects of the sweating system. — Working under such conditions as have been described as characteristic of the sweat shop, in the crowded, ill-ventilated rooms, and at excessive speed, affects the health of the workers to such an extent that " it is rare to find, after four or five years, any healthy person there." [13] Sweat shops are the best possible breeding places for consumption. Young children are particularly susceptible to disease, and many are found suffering from curvature of the spine, pulmonary diseases, weakened eyesight, and other ailments from which they never recover. They become stunted, and lack the normal energy of children. Men and women who have entered the sweated industries in their youth suffer from old age at from 35 to 40 years of age.[14] Periods of overwork followed by long periods of unemployment often lead to insanity and cause many suicides among the garment workers.[15]

The entire family living in one or two rooms prevents the privacy of a normal home life. The bringing of these hired workers into the working and living rooms of the family tends to lower the moral standards of the children as well as of the others within the house.

Anything that weakens the physical and moral status of large numbers of workers is a serious menace to society. Children of the sweat shop are unfitted for taking their normal place in society. Working in the home in this way, and for such long hours, prevents the worker from mingling with other people, from learning the language, and from becoming familiar with the customs of the country. In this way the sweater is said to be " an important factor in causing and continuing segregation of nationalities within our large cities." [16] The low wages paid for but brief seasons of the year leave a large number of these workers helpless during the slack season, at which time they have to be helped out through the aid of charity, thus making paupers of many who are willing to work. The presence of this large amount of

available and cheap labor has retarded the introduction of new machinery and new methods into this industry. Because of the many serious effects on the individual, and the menace to society of the conditions which exist in these trades, every effort must be made to eliminate the sweat shop from our industrial system.

Present status. — Although we have no exact statistics in regard to the amount of home work done, or the number of persons employed in this kind of work, we do know that there are some 13,000 tenement houses in New York that are licensed by the Bureau of Factory Inspection. In these licensed tenement houses, work can be given out by the contractor, to be made or finished in the homes " where the labor of all members of the family can be utilized without reference to age or factory law." Although many cities have sweating conditions, New York is said to be the center of this system in this country. A recent investigation showed that in this city, one block alone contained seventy-seven factories and employed 40,000 workers. This part of the city is called the leading clothing center of the world. In some blocks, more than three quarters of the apartments contained home finishers. Two of these congested blocks are said to be " the poorest visited in New York, to have the dirtiest homes, lowest standards of living, and the highest disease and death rate of any section of the city." [17]

Attempts at control in the past. — About the middle of the eighties, the people began to be aroused over the evils of the sweat shop. Since that time some twelve states have passed laws attempting to regulate, to a greater or less extent, work in the tenements.[18] Some of the principal restrictions imposed by these laws were the requiring of tenements wherein certain industries were carried on, to be licensed, and providing that no one of a list of articles should be manufactured in tenements without this license. The permit is to be granted only after the building has been inspected and

found to comply with the requirements of ventilation, heating, and lighting, and may be revoked at any time on the advice of the inspector. Other legislation prohibits the performing of certain kinds of work in sleeping rooms, or in rooms " not having a separate outside entrance except in case of work performed wholly by members of the family." Most of the laws apply to particular industries, and consequently such industries as are not in the list are not subject to regulation. This leaves a number of occupations free from all control by the factory inspector. The earlier attempts to check these evils through legislation were often nullified, many of the acts being declared unconstitutional. The grounds given were that " they interfered with the freedom of the home," or that they did not have " the justification of being a police measure for the protection of the health of the public." [19] Recent decisions have been more favorable, however, in that they have recognized the power of the state to interfere in matters that affect the welfare of the people.

Remedies proposed. — *Legislation.* — The measures taken so far have not been very effective. What we need, to rid the cities of these places and of this menace, is, first, legislation. More sanitary workshops must be required, with conditions coming up to the ordinary requirements of health as to light, heat, ventilation, and cleanliness. Men and women must not be allowed to work in the same rooms where people are sick with contagious diseases, on articles which will pass into homes in all parts of our country. These measures for sanitation must not only be made more comprehensive, but they must be strictly enforced. This, as has been mentioned before, is a very difficult matter as long as men and women are allowed to make workshops of their homes, and the ultimate solution of the problem will probably not be reached until all manufacturing in tenements is prohibited by law.

One of the reasons employers give for clinging to this method of manufacture is the abundance of cheap labor.

They claim that there are many more people of the lower classes, or immigrant classes, who desire this work than can be supplied with it. If this is so, the restrictive immigration legislation which is being called for at the present time will help in reducing the number of people who will accept work on the terms offered in the sweating system.

Legislation must be passed limiting the hours of labor in these industries, and such laws must be rigidly enforced.

At present there seems to be no lower limit to the amount that is paid for work. The amount the worker receives depends on what he or she can be made to take, by such arguments of the sweater as, "Do these for 4 cents a dozen, or leave them. There are many men and women in this block who will work at this price and be glad of the chance." Ground down to this level, the only way for the immigrant is to take the work; and the only escape from this condition will come through some form of a minimum wage law.

Organization. — Aside from the gains that might be effected through legislation, are those that would come from some definite organization of the sweat shop workers. So far, this has been almost impossible because the workers have been so scattered. They have, as a rule, been too ignorant even to realize the benefits that would come as the result of some form of organization. They have been kept, by the nature of their work, from a knowledge of the outside world, and from the realization of their own abject condition, as well as of the fact that there are thousands of others suffering just as they are. In the past, these workers have had little bargaining power because of their lack of organization. A thorough organization of these workers would enable them to make more effective demands for higher wages and for better labor conditions.

A more even seasonal distribution. — One of the worst evils of the system is, as has been stated before, the seasonal character of the work done in sweat shops. Thus this should be

one of the points of attack. In the case of an industry controlled by the dictates of fashion, as is the clothing industry, it is hard to overcome the seasonal character of the work. But attempts are being made by some manufacturers to make certain articles of clothing that are stable, and for which the demand is quite even, in the slack seasons, leaving the workers free to work on the garments of the new fashions in the formerly very rushed seasons. This helps conditions to some extent, but at best it only touches the edges of the real question.

Factories. — The modern movement toward the factory system will tend to the elimination of many of the evils of the sweat shop and home workshop. Coats and suits should not be finished, hand embroidery should not be done, nut meats should not be picked over, nor should flowers and plumes be made, in the tenement homes and shops without supervision, and under the conditions of filth and disease which prevail there. In the factory, conditions may be prescribed and regulated. In this respect, they are an improvement over the sweat shops. But certain evils of the sweating system have followed these industries into the factory, and even there we find the speeding-up process, and the low wage. However, the large, well-supervised, and well-organized factories now developing are a great improvement over the sweat shops.

Education of the employer. — Fundamentally, education is the crying need in the solution of the problem. There must be education, first, of the employer, until he has arrived at the point where he will furnish workrooms for all his workers, and where he can truthfully say, "All articles are made in our own factory."

Education of the employee. — Then comes the education of the employee, and this means a more complicated task, for the sweat shop worker himself has no time even to learn the language and the customs of the new land to which he has

come. Immigrants must be helped, when they first come, to choose their work, and must be given the opportunity for some social life, if not for education itself. Attention is being centered on the children of the sweat shop workers. The toilers themselves are often willing to work even longer and harder, that their children may go to school and thus avoid choosing the same occupation that has made their own lives only drudgery. Vocational training and vocational guidance will help the young person into better conditions of employment. Compulsory education, if enforced, will hold the child longer in school, give him a greater familiarity with our language and customs, and in every way make him better fitted to cope with industrial conditions.

Education of the public. — The most necessary of all lines of action is the education of the public. With this will come the other needed reforms, and the legislation necessary to make them uniform and universal. The trade unions have been doing some work along this line, by the use of the Union Label. This label is only granted to those whose goods fulfil certain requirements of manufacture. The Consumers' League is probably the most effective instrument that we have for the public education, as well as for the protection of the consumer. The national league was organized in 1899 [20] for the purpose of arousing public sentiment against the evils of the sweat shop, and taking as its basis the fact that every consumer has a right to know what he is buying in the way of food and clothing, and a right to know where it came from. In order that the workers shall receive at least a living wage, and that sanitary conditions shall exist wherever goods are produced or manufactured, this League issues the Consumers' League Label to those manufacturers living up to the following conditions : [21]

1. The State Factory Law is obeyed.

2. All goods are made in premises approved by the League.

3. Overtime work is not permitted.
4. Children under sixteen years of age are not employed.

Conclusion. — At the present time there are hopeful signs regarding the possibilities of lessening these evils. As the clothing industry becomes more standardized, which is inevitable with the increasing amount of ready-made clothing, more and more of this work will be carried on in the factory where there are greater possibilities of inspection and control. Recent legislation regulating the employment of women and children, limiting the hours of labor, and particularly that establishing the minimum wage, has shown that it is possible to better these conditions. Other legislation, such as the recent tenement house laws, laws providing for parks and playgrounds, compulsory education laws, in fact, all laws aiming at the betterment of social conditions, will indirectly affect the sweat shops, in that they remove some of the conditions under which the sweat shop flourishes. And finally, as we study social conditions, and as the people become aroused to these evils of the sweat shop and their menace to society, greater effort will be made, and more effective action taken, against this abnormal and unnecessary phase of our industrial development.

QUESTIONS

1. What changes in industry have given rise to the sweating system?
2. Describe the sweating system.
3. What are the conditions leading to the sweating system?
4. Describe the contractor, or sweater.
5. What is said about sweat shop workers?
6. What are the two principal kinds of sweat shops? Describe each.
7. In what industries does the sweating system flourish?
8. What are the two principal causes of the growth of the system? Explain each.
9. What are the principal evils associated with the sweating system?

10. Tell about the hours of labor in the sweated industries. The wages. The insanitary conditions.
11. In what ways does the sweat shop spread diseases?
12. What is meant by the " speeding-up " process? By " driving "?
13. Tell about the subdivision of labor in the sweated industries.
14. Why is inspection so difficult in these industries?
15. Give a summary of the individual and social effects of this system.
16. What is said about the present status of this problem?
17. What attempts have been made in the past to control the sweating system?
18. In what ways may legislation affect this system?
19. What is said about organization as a means of checking the sweat shop evils?
20. How would a more seasonal distribution of work affect the sweat shop?
21. The modern movement toward the factory will tend to have what influence on the sweat shop?
22. In what ways is education essential in combating these evils?
23. Tell of the National Consumers' League. What does their label stand for?
24. Give a summary of the conclusion to this chapter.

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CHAPTER VII

LABOR ORGANIZATIONS IN THE UNITED STATES

I. Labor organizations.
   1. Definition.
   2. Classification.
      a. Labor unions.
      b. Trade unions.
      c. Industrial unions.

II. Conditions giving rise to labor organizations.

III. Brief history of labor organizations.

IV. Methods and policies of labor organizations.
   1. Collective bargaining.
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V. Conclusion.

Labor organizations. — *Definition.* — Labor organizations are the result of a conscious effort on the part of wage-earners to better their conditions. Such an organization may be defined as " a continuous association of wage-earners for the purpose of maintaining or improving the conditions of their employment." [1]

Classification.[2] — There are three more or less distinct types of labor organization, — labor unions, trade unions, and industrial unions.

The labor union was rather characteristic of the earlier forms of organization. It was not so distinctly a class conscious movement as were the later forms of organization,

and although wage-earners constituted much the larger proportion of its membership, not infrequently employers and professional and salaried men were associated with the wage-earners in a united effort to better general conditions of labor. Trade and industrial lines were not drawn in these earlier, as in the later, organizations. These unions were more idealistic in their aims, and sought the betterment of all classes. To secure their ends they relied primarily on education, labor legislation, the directing of public opinion, and political activity.

The trade union is less idealistic and more practical in its methods; and is organized more directly in the interests of its own particular membership. The membership of a trade union consists of the wage-earners of a given trade. The occupational lines are carefully drawn in this form of organization. Although the trade union frequently exerts considerable political power, by throwing the weight of its influence for or against a man or a policy known to favor, or be opposed to, the interests of labor, it places its main reliance on collective action rather than on political influence. Although the strike and the boycott are occasionally used, the trade union places its greatest reliance upon collective bargaining as a means of securing better conditions of employment for its members.

The industrial union is a sort of compromise between the other two. The unit of this type of organization is the industry rather than the occupation as in the trade union. In the industrial union are found all the workers of a given industry, whether skilled or unskilled, and regardless of the different occupations which they follow. The aims and policies of this kind of a union are very similar to those of the trade union. Its principal advantages are that it makes possible a more united effort, because it does away with the friction which invariably has resulted when each trade within an industry was organized to further its own particular in-

terests; and it also means a larger and more strongly organized union because its membership is compactly gathered together in one industry rather than scattered throughout several. The principal weakness of the industrial union is the difficulty of securing sympathetic coöperation and harmonious action because of the diversity of occupations represented. All grades of skill are found in almost any industry, and frequently the more highly skilled and highly paid artisans are greatly outnumbered by the less skilled workmen. They naturally resent the influence which the less skilled are able to exert in union affairs because of their superior numbers. However, in spite of this difficulty, there is, at the present time, a very decided movement toward industrial unionism.

Conditions giving rise to labor organizations.[3] — The real reasons for labor organizations are found in the changes taking place in industry growing out of the industrial revolution. Before this time, the principal industrial unit was the family. Each family had its own spinning wheel and loom, and such other machinery as was then used in the various industrial processes. A large amount of the raw material that was used was supplied by the family, and the labor was contributed by the various members of the household. When extra labor was needed, apprentices were taken into the household, and all lived and worked together as one family unit. There was no permanent wage-earning class, as each apprentice and journeyman looked forward to the time when he should become a master workman and head of a family group.

As a result of the invention of the flying shuttle, the spinning jenny, the power loom, and finally the utilization of steam power in these new processes, during the latter part of the eighteenth century, a complete revolution took place, not only in the methods of manufacture, but also in the social and industrial life of the time. This new machinery

was more expensive. Each individual family could no longer afford the machinery which was gradually supplanting the old hand looms. It could be owned only by the few who had amassed more than the average amount of wealth. By the use of this new machinery, production was increased many fold. The large amounts of raw material could no longer be supplied by the individual family, and the business became too large to be carried on within the household. In this way we have the beginnings of the factory system. Those who do the manual work no longer own or control the factory or workshop. The machinery or tools which they use, the raw material with which they work, and the finished products, — all these are owned and controlled by a new class, the capitalist. The one who toils at manual labor can no longer carry on his work within his own house, but must sell his labor to the one who owns the factory, the machinery, and the raw material. A new class has now entered the industrial field, the class of wage-earners.

Wage-earners must live near their place of work, and, as the factory requires more laborers, large numbers of families tend to congregate within comparatively limited areas. There is no longer that close relation between employer and employee which formerly existed. As improvements are made in machinery, it becomes more complex and more expensive, more power is used, and larger factories are required. All this means that a constantly increasing amount of capital is necessary for each unit produced, which leads to a constantly decreasing possibility that the wage-earner may ever, himself, become an employer. More and more the industries formerly carried on in the household are being absorbed by the factory. This likewise tends to increase the number in the wage-earning class.

As a result of these changes, we came to have two distinct classes in the industrial field, the employer and the employee, — the capitalist and the wage-earner. The capitalist,

through his control of machinery, raw material, and products, was able to absorb an increasing proportion of the wealth produced. The wage-earner soon began to realize his disadvantage in bargaining individually with the employer. The employer was not dependent upon the labor of any particular individual, but the laborer was dependent for his very existence upon the sale of his labor power, and could not long maintain himself without his wages; hence he was often compelled to sell his labor at a very low price, and work under conditions over which he had little control. He was at a further disadvantage in his bargaining, in that the employer was invariably a man of wider experience, of considerably more than average ability, and had a reserve of funds which could tide him over a period of distress. It was the recognition on the part of the wage-earners that they could make more effective their demands for higher wages, shorter hours, and better working conditions, through combined effort, that led to the forming of labor organizations.

Brief history of labor organizations.[4] — The years 1824 in England, and 1825 in the United States, may be said to mark the real beginnings of modern trade unionism in these two countries. Various combinations of laborers had been known long before the period of the industrial revolution, but most of these were of a more or less temporary character, and partook rather of the nature of a revolt or rebellion. The guilds which became so prominent through the Middle Ages were made up of both masters and wage-earners who worked together, the guilds being formed in the interests of the industry, rather than in the interests of the wage-earners. Organizations of laborers as a distinct class do not become prominent until after the industrial revolution. By 1800 they had attracted sufficient attention for Parliament, whose membership was from the class of employers, to pass very stringent laws against any such combinations of wage-earners. After much protest this law was repealed in 1824.

This date marks the beginnings of a very rapid growth in trade unionism in England.

The first quarter of the last century has been called the "germinal period" of trade unionism in the United States. Even before this, however, there was an organization of journeymen printers in New York in 1776, and in Philadelphia in 1786, and of journeymen cordwainers in the latter city in 1792.[5] Most of these early organizations were secret in character and were called trade societies. The second quarter century, from 1825 to 1850, has been called the "flowering period" of American labor organizations. It was at the beginning of this period that the organizations became more open, and occasionally those from several trades united to form a central representative body. The first of these trades' unions (not trade unions) was effected in Philadelphia in 1827, and was called the Mechanics Union of Trade Associations. During the next few years, a number of these trades' unions were established in the largest cities. Although many unions were formed during this period, most of them were loosely organized and continued in existence but a short time. Some went into politics and championed various social reforms. The latter part of this period was "a time of intense intellectual ferment"; not only the workers but also many from all classes were demanding more humanitarian measures. Such men as Horace Greeley, Robert Owen, and Albert Brisbane were vigorously advocating various reforms. "Labor unionism and humanitarianism were curiously mixed,"[6] and the more distinct trades' unions were rather succeeded by various workingmen's associations. The entering of labor unions into the political arena, and the dissipating of their energies through the championship of so many and such various social reforms, resulted in a serious disintegration of the labor movement toward the latter part of this period. The labor parties, however, had not been without influence during this time, but were a most important

factor in securing the abolition of imprisonment for debt, a mechanics' lien law, and the extension of the free public school system.[7]

The next period, from 1850 to the close of the Civil War, is described as the period of nationalization. The unions of this time attempted to profit by the mistakes of the previous period. They were organized on a much more careful, systematic basis, " political affiliations were dropped, less attention was devoted to ' Reform,' and more attention to the improvement of conditions of employment; most important of all, perhaps, the local unions, too often antagonistic and quarrelsome, began to combine into more powerful national unions." Not only national but many international trade unions were formed during this period.

The twenty years from 1866 to 1886 have well been called the period of amalgamation. In 1866 the National Labor Union was formed through the uniting of the various labor organizations of the country. This National Labor Union grew very rapidly, reaching a membership of 640,000 within two years; but its decline was just as rapid. It " soon passed from the consideration of arbitration, hours of labor, strikes and other labor problems, to the endorsement of wild schemes of irredeemable paper money, became involved in politics, and then perished." The next great national organization was the Knights of Labor. This began in 1869 as a small union of garment cutters, and gradually increased in numbers until it reached its greatest strength in 1886, when it had a membership of about 600,000. It had a most highly centralized form of government. Though at first organized as a trade union, it later admitted to its ranks " any person over 16 years of age not a lawyer, banker, professional gambler or liquor dealer." The aim of the Knights of Labor was not so much to advance the interests of a particular group, as it was to improve the conditions of the laboring class as a whole. They placed but little reliance upon the strike or

the boycott, but relied rather upon coöperation, political action, and education, as a means for bettering their condition. After 1886 this organization began to decline. It became involved in several disastrous strikes, and was also materially weakened, as were the labor unions of the second period, by advocating many general reforms, and by carrying its measures into the political arena. Since 1900, although still retaining their organization, the Knights of Labor have had little influence in the industrial world.

The period of federation, the most recent period in the growth of labor organization (1886 to the present time), has been characterized by the growth of the principle of federation rather than amalgamation. Emphasis has been placed upon the trade union rather than upon the labor union as the industrial unit; and more recently, there has been quite a tendency toward the industrial union. One cause of the decline of the Knights of Labor was the growth of the trade-union sentiment, and the idea of the federation of the different trade unions. These two ideas were embodied in the principles of the American Federation of Labor, the dominant labor organization of this period.

The American Federation of Labor was organized in 1881. Its membership had exceeded a half million by 1900, and is now approximately 4,500,000. As its name implies, this is a federation composed of a hundred and ten national and international unions, 46 state federations of labor, 816 city central federations, and 884 directly affiliated local unions.[8] These organizations represent some thirty-four thousand local unions. About three fourths of the total union membership of the United States and Canada is now affiliated with this federation.[9] The relation between the American Federation of Labor and the local units is quite similar to that existing between our Federal government and the smaller units of government, the Federation having only such power as is conceded to it by the organizations of which it is com-

posed. The supreme lawmaking body of the Federation is the annual convention. Unlike the Knights of Labor, the American Federation has carefully refrained from partisan politics. It has relied upon industrial methods, upon the use of the strike, the boycott, and peaceable negotiations with employers, rather than upon political methods, or the securing of its ends through legislation. It has held that greater benefits could be secured in the interests of labor through concessions from the present political parties, than through forming a third party. It maintains a strong labor press, and exerts a very strong influence in supporting legislation in the interests of the working class, and in opposing legislation against the interests of this class. Within the past few years there has been a growing tendency for labor organizations to enter the political field, more particularly, for the state federations to do so; and in some of the states where labor is most highly organized, it has been able to exert a very considerable political influence.

Among the more important things for which the Federation stands [10] may be mentioned the eight-hour workday, and the Saturday afternoon legal holiday; more effective inspection of workshops, factories, and mines; the forbidding of the employment of children under sixteen years of age; the prevention of interstate transportation of products of convict labor, or the products of uninspected factories and mines; the direct employment by the federal, state, and municipal governments, of workers, without the intervention of contractors; the establishment of old-age pensions, and a general system of state insurance against sickness, disability, and accident; freedom of speech, of the press, and assemblage; unrestricted and equal suffrage for men and women; the initiative, the referendum, and the recall; the election of the president and the vice president of the United States by a direct vote of the people; limiting the powers of judges in declaring laws unconstitutional; making the constitution

of the United States more easily amendable; and, finally, further measures for education, and particularly for vocational training. The Federation does not have a permanent, fixed program, but stands rather for what it considers to be the most vital, pressing needs, its general object being, as expressed by President Gompers, "to better the conditions of the workers in all fields of human activity."

Much has already been accomplished both in the United States as a whole and in the individual states towards securing many of the measures for which the Federation has been contending.

Methods and policies of organized labor. — *Collective bargaining.*[11] — As we have seen, one of the principal reasons for the labor organization is the helplessness of the individual laborer in bargaining with the employer. As labor organizations have grown in strength, they have grown more insistent that the individual should rely upon the union rather than upon himself in the matter of adjusting wages, hours, and conditions of labor with the employer. In this way collective bargaining has gradually supplanted individual bargaining in all of the stronger unions, the individual, or a group of individuals, selecting representatives to confer with the employer or representatives of the employers' association. The union men maintain that this is simply in accord with the growing tendency in other forms of business organization, as in the large corporation where the individual investor delegates his rights and powers to the directors and managers. They maintain that the representative of the individual laborers has the same right to bargain in their behalf as has the director or manager of a corporation to represent the individual investor, and that it is only through this united action that the individuals can be protected from ruthless competition among themselves. Such competition would inevitably lead to a lowering of wages, together with a greatly weakened influence as to hours and conditions of labor.

In addition to raising the general level of wages, collective bargaining tends to establish a minimum wage, through the fixing of wages at a given amount under which the individual wage-earner is not permitted to bid. While it is true that this works more directly to the advantage of the less efficient worker by raising his wages to the level of the more efficient, yet it is the inferior workman who is the first to be laid off whenever there is a lessened demand for labor. It is also the better workman who is the more likely to be assigned the more delicate and varied tasks, and who stands the better chance of promotion. Such conditions as are found in sweat shops are largely the result of the absence of any collective bargaining, each individual being free to underbid any other in the labor market.

One of the most sane and effective ways of bringing about a better understanding between employer and employee is through the *joint conference*. By this is meant simply a meeting where the representatives of the employers and the employees come together and talk over wages, hours, and any other points of difference which may have arisen between them; and the attempt is made to arrive at a mutual agreement through peaceable negotiations. The compacts made at such conferences as these may be for a definite number of months or years, or for an indefinite period, and are called *trade agreements*.

Instead of merely meeting together in the attempt to thrash out differences, both employer and employee sometimes agree to submit their differences to some board, and to abide by the decision of that board. This is called *arbitration*. Ordinarily such a board is made up by the employers selecting one member, the employees another, and these two agreeing on a third. When it is simply through mutual agreement that questions of difference are brought before such a board for settlement, it is called voluntary arbitration. When the government compels the parties to

submit their differences to an arbitration board, and then enforces the decisions of this board, the action is called compulsory arbitration.

Although compulsory arbitration has been fairly successful in the Australian colonies, it is not looked upon with very much favor in the United States. Not only the representatives of labor organizations, but also students of labor problems are more inclined to look toward the joint conference and trade agreements as the means of adjusting the differences between labor and capital. It is felt that a much more permanent adjustment can be made by coming together on a friendly basis, and that through straightforward, open discussion of each other's grievances there may be eliminated many of the misunderstandings which are such a prolific source of conflict. A number of the states have already provided for permanent state Boards of Conciliation and Arbitration. Either party may appeal to this Board in case of grievance, and in some states the Board has the right to intervene whenever it learns of any threatened labor dispute. When unable to arrive at any settlement by conciliation, the parties may agree to settle their differences by arbitration. Some of the states provide that in case the parties are not successful in conciliation, and refuse to submit their differences to arbitration, the board shall have authority to make a public investigation, relying upon such an investigation to create a public sentiment, which has been found to have very great influence in settling labor disputes. A large number of disputes have been settled by such boards, and many costly conflicts have, as a consequence, been avoided.

Strikes and lockouts. — In the report of the United States Bureau of Labor [12] a strike is defined as " a concerted withdrawal from work by a part or all of the employees of an establishment, or several establishments, to enforce a demand on the part of the employees." A lockout is defined as " a refusal on the part of an employer, or several employers, to

permit a part or all of the employees to stay at work, such refusal being made to enforce a demand on the part of employers." In both of these cases there is a discontinuance of the work, the essential difference being that in the strike, the initiative in putting a stop to work comes from the employee, while in the lockout the initiative comes from the employer. From the time of the slave insurrections and the peasant revolts down to the present day, the strike has been one of the readiest weapons to which the laborer has turned in the attempt to better the conditions of his labor, or to prevent some change which he considered detrimental to his interests as a worker. The bakers of New York City are said to have struck for higher wages as early as 1741, and by 1835 strikes had become so numerous that a New York daily paper declared that "strikes are all the fashion."[13] For the five years from 1915 to 1919 inclusive, there were on the average 3314 strikes per year. This means an average of nine strikes a day for every day of the year. The time lost because of strikes has varied greatly, some strikes lasting several months, others but a few days, the average duration being about twenty-two days. The total number of persons thrown out of work because of lockouts has been about one twentieth of the number out of work because of strikes. Lockouts ordinarily last for a considerably longer period than strikes, their average duration being about forty-five days.[14]

During the last decade, the number of persons out on a strike has varied greatly from year to year, the greatest number, one million two hundred thousand, being out in 1917, and again in 1918, and the smallest number, one hundred sixty thousand, in 1914.[15] There are always fewer strikes during periods of industrial depression, the number increasing with the return of prosperity, when the prospect of winning is greater.

About two thirds of the strikes are ordered by labor organizations. The remaining third are begun either by em-

ployees who are not members of organizations, or by members who go on strikes without the sanction of their organizations. Out of the total number of strikes on record, those ordered by labor organizations were much more successful than those conducted independently of any such organization. Of the former, about one half were wholly successful, about one third failed, and the remainder were partly successful. Of the latter, about one third were successful, and more than a half failed.[16]

By far the largest proportion (two fifths) of all these strikes were either for higher wages alone, or for higher wages together with some other demands. The next most important cause was disagreement concerning recognition of the union, or of union rules, which accounted for about one fifth of the strikes.[17]

Picketing is considered a very important adjunct to the strike. By this is meant the stationing of a few strikers, called pickets, near the factory or plant against which a strike is being conducted, in order that they may intercept any strike breakers, and endeavor to keep them from taking the places vacated by the strikers. Although peaceful picketing has been theoretically considered legal, the courts have generally held that picketing implies intimidation and is therefore illegal. It is said that "almost every decision on the subject affirms the abstract right and condemns the actual practice of picketing."[18]

For the past few years, the number of strikes has not increased so rapidly as the industrial population. One reason is that both parties are coming more and more to recognize the enormous costs of strikes, and a more serious effort is made to adjust difficulties by peaceful methods. More effective machinery is provided, such as boards of conciliation and arbitration which are able to settle a large number of differences before a strike is resorted to. Another reason for the relative decrease in the number of strikes is the con-

servative influence of the trade union. As the central unions gain increasing influence over the local unions, and as they have larger benefit funds in their treasury, they tend to become more conservative. A strike can be declared only after the local organization has attempted to settle the difficulty. Failing in this, the approval by two thirds vote of the local organization is usually necessary; and then, before the strike can be called, the approval of the national officers must be secured. These officers decide whether or not the employees are justified in the demands they are making, and also whether this is the most opportune time for making those demands. In this way more time is secured in which each party may arrive at a better understanding of the other's point of view; and hasty, impulsive, and ill-advised action on the part of the local union in calling a strike is averted.

Boycotts and blacklists. — Another weapon frequently resorted to by employees in labor disputes is the boycott. The counterweapon in the hands of the employer is the blacklist. The boycott is defined as "a combination to suspend dealings with another party, and to persuade or coerce others to suspend dealings, in order to force this party to comply with some demand, or to punish him for non-compliance in the past."[19] The simplest form of boycott is that in which a group of persons agree to have no dealings with some other party against whom they have some grievance. A more complex and also a more common form of boycott is one involving third parties who are not directly interested in the question at issue. This may be effected either by the interested party's refusing to deal with any dealer handling products made by the party being boycotted, or by the coercion of others who are not interested in the dispute to join in the refusal to deal with the party being boycotted.

A form of boycott frequently made use of by the trade union is the "Unfair List." This is a list of employers whom the trade unions consider unfair because of their unwillingness

to concede to their demands, and with whom all trade unionists are exhorted to have no dealings, directly or indirectly.

A negative form of boycott is the use of the union label. This is a label placed on goods made by union men in union shops. Members of trade unions and others are urged to purchase, wherever possible, only those goods which bear the union label. This is to promote the manufacture of goods

National Women's Trade Union League Label.

under union-imposed conditions, and to increase the number of union men and women employed.

When the conditions of the boycott are reversed, the employer taking the initiative and refusing to hire certain employees whose names are included in a list of those held to be undesirable by employers because of too close affiliations with labor organizations, the process is called blacklisting. Al-

though the principle of the blacklist is practically identical with that of the boycott, yet it is often much more injurious to the men concerned than is the boycott to the employer, because it is a "boycott of the worker's commodity — labor."[20]

The use of the negative forms of boycott, that is, of the Union Label and the Fair List, and the use of the simplest form of boycott, where no coercion is used, are now generally accepted as legal. However, concerning the other forms of boycott, and the blacklist, there have been many conflicting opinions handed down by the different courts, and their legal status is by no means fixed beyond controversy. They are, at best, doubtful remedies, and are movements in the wrong direction. They condemn a man without due trial, and are liable to the grossest abuses.[21]

Union Label.

Closed shop.[22] — Some of the most bitter conflicts between employee and employer have been waged over the question of the closed versus the open shop. An open shop is one in which no discrimination is made in the employment of union or non-union labor. In the closed shop, the unionist refuses to work with any one not a member of the union. The employers have invariably been opposed to the closed shop on the grounds that it is un-American and monopolistic, and that it interferes with the non-union man's freedom in securing work; while the trade unionists have claimed that the open shop destroyed the effectiveness of their organization, and that the maintaining of the closed shop principle is the only way they have of preventing the non-union man from underbidding in the labor market and thus lowering the standards in regard to conditions of labor which have been built up and maintained by the unions. It is probable that the controversy over the closed versus the open shop will

become less intense and less vital to the interests of labor, as the unions become stronger, embracing a larger proportion of those engaged in any particular industry, and as the principle of collective bargaining is more generally recognized and utilized by both employer and employee.

Restrictions on output.[23] — There is perhaps no policy of the trade unions which has been less understood, and more bitterly assailed by the general public, than the restriction of output. The output of any industry may be restricted in various ways, such as by reducing the hours of employment, prohibiting or penalizing for overtime, prohibiting of piecework, and by preventing the introduction of labor-saving machinery. Or the output may be restricted by more directly limiting the amount of work which one laborer is permitted to do, as in limiting the number of bricks that a bricklayer may lay within a day, the number of machines which one man may tend, the number of pieces of work that the laborer may turn out in a day, or the amount of wages that he may receive within a given time.

Such restrictions may be either justifiable or unjustifiable. They may work to the interests of the working class, and of the industry in general; or they may prove extremely vicious, not only corrupting the character of the workingmen themselves, but also tending to undermine industry.

Underbidding may take place just as readily by offering to do an extra amount of work within the given time, as by offering to work an extra number of hours or at a lower wage than that agreed upon by the union. In either case it is an underbidding which tends to undermine the standards which the unions are striving to maintain. When an excessive amount of work per day tends to lower the efficiency of the worker, there is the same justification in interfering that there is in limiting an excessive number of hours of work per day. Unrestricted underbidding in the amount of work, like underbidding in regard to hours or wages, would make col-

lective bargaining impossible. In some trades, particularly those in which piecework prevails and in those like the sweated industries in which the unions have been able to exert but little, if any, influence, it is not at all uncommon to bring in a pacemaker, or rusher, who, because of his exceptional cleverness or deftness, may be able to do much more than the average worker, or may be able to set a pace which even he himself could not maintain for any length of time; and yet his work will be taken as the basis on which the wages of all will be fixed. As the result of such pacemaking, the average worker is stimulated to work beyond his strength; and even though he may earn a little more per day at first under the piece system, there is the inevitable tendency to lower the rate per piece so that the worker actually receives but little if any more per day than he did formerly. "Overdriving and the long working day tend to destroy the human resources of the nation, and to lower the worker to the level of the brute or of the automatic machine." When such conditions as these prevail, and wherever such unrestricted underbidding tends to destroy the effectiveness of collective bargaining, a reasonable restriction of output is justifiable.

On the other hand, there are certain forms of restrictions of output which are most detrimental to the interests of society and to the workers themselves. Both unionist and non-unionist workers have not infrequently opposed the introduction of labor-saving machinery, on the ground that it would lessen the demands for labor. Such opposition would mean a lessening of the total amount produced, hence of the total amount available for consumption, and is contrary to the whole spirit of progress. Fortunately, greater numbers of laborers are now coming to see the futility of such opposition to labor-saving devices. There are other forms of restriction by which work is needlessly strung out, or by which work is done more slowly than is necessary either for the health of the laborer or for the quality of the output. This

" killing time " or " soldiering " not only lessens productivity, but also exerts a pernicious influence on the work habits of the individual working under them. This " adulteration of labor " arouses such bitter hostility on the part of the employer who expects, and justly, a fair return for the wages that he pays, as to interfere seriously with any attempts at collective bargaining. From the standpoint of trade unionism, of the individual worker, and of the general public, such forms of restriction cannot be too strongly condemned.

Thus we see that the justification of restriction of output is dependent upon whether or not it is reasonable or fair, and upon whether or not it is necessary in the interests of the efficiency and health of the worker and the quality of the product of labor. John Mitchell, in his " Organized Labor," says that " it is to the interest of workmen and of employers as well, that all restrictions upon output, except in so far as they are clearly and obviously necessary to prevent loss of health or inferior workmanship, should be permanently and completely abolished." [24]

Benefit features of trade unions.[25] — Mitchell says that " the most direct, although not the greatest, benefit derived by workmen from their unions is insurance against death, accident, sickness, and, in some cases, loss of tools or failure to secure work." The benefit features of trade unions have been developed much more fully in England than in the United States. This is because the unions are older, are more thoroughly organized, and follow trade lines more closely. In the United States the unions are gradually extending the benefit features of their organizations, some of the more highly organized of the unions having now a very complete system of benefits. Most American trade unions pay a small death or funeral benefit, a number pay sickness insurance, some maintain out-of-work benefits and make loans to members to assist them in finding work elsewhere, and others pay benefits to those who have become incapacitated for work because

of old age and long service. This benefit fund is not only a great advantage to the individual worker, rendering him assistance at the times of his greatest need, but it is also of very great benefit to the labor organizations themselves. It tends to increase the membership of the unions, many joining primarily to secure the benefit features. A better class of workmen, men who know the benefits of insurance, are attracted to the union. After entering the union, their enthusiasm and loyalty is stimulated because they can feel that in case of misfortune their union will be able to help them over their period of distress. The union having a large reserve fund will be much more cautious against hasty or ill-advised actions whereby this fund may become dissipated. Also, the possession of such funds is of great advantage in maintaining discipline within the union. A member who has paid large amounts into the union treasury will be very careful not to do anything which may cause his expulsion and the consequent loss of benefits from such funds. The recent development of workingmen's insurance through state action may tend to check the extension of this feature of trade unions, as may also the present tendency toward the industrial type of union. The Cigar-makers' International Union now has a reserve fund of about $400,000. The president of this union says that "a formidable reserve fund in the treasury of the union is one of the surest barriers against hasty, ill-advised, and ill-timed strikes, as well as one of the greatest preventives of lockouts by employers." [26]

Conclusion. — Organized labor is a comparatively recent phenomenon in the industrial life of the people. It represents the struggle of a comparatively new class, the wage-earners, to secure industrial freedom. They have been gradually coming into a consciousness of their condition, and with this has come an awakening of their desire to better these conditions. They have had to feel their way, often making costly mistakes, and losing much of the ground

gained; then struggling on, profiting by previous mistakes. Frequently they have been controlled by well-meaning but unwise and inexperienced leaders, and sometimes even by those who have sought only their own profit rather than the welfare of the organization. Just as the employer, when his power was unrestricted, seriously abused that power, so have the trade unions, as they have increased in numbers and strength, in those sections where they have largely dominated in industry, not infrequently seriously abused their newly acquired power. For many years labor organizations were bitterly opposed, but to-day, practically every one concedes that, with the changes which have taken place in industry, the organization of labor is not only justified, but also necessary both in the interests of those who earn their living by manual labor, and in the interests of the community at large. Not only labor leaders but those representing other classes as well are now generally agreed that "labor organizations have been one of the greatest factors in improving the material and moral conditions of the wage-earner, and in raising the standard of industrial citizenship," and that "the union is as necessary an outgrowth of our modern industrial system as is the corporation." [27]

What is necessary now is that organized labor be freed from those abuses which have followed its coming into power, but yet retain the power of conferring on its members those benefits for which it stands. A great advance toward a better understanding between labor and capital will have been made when the present demoralizing uncertainty in regard to the legal status of the different policies of trade unionism will have been succeeded by more definite and specific legislation, and by a decrease in the number of conflicting court decisions, so that both employer and employee may know definitely what they may or may not lawfully do. As the organizations become older and more thoroughly organized; as the rank and file of members become more deeply conscious

of their power and their responsibility, and a more earnest effort to correct certain of these abuses is made from within; and, finally, as unions come to be freely recognized by the employers, — just in so far as these changes take place, may we hope that much of the bitterness in the struggle between capital and labor may be eliminated. There is a much greater possibility of the elimination of the abuses on both sides as well as of securing fair and reasonable terms in bargaining with each other, when each party is on such a basis that it can command the confidence and respect of the other, and when each is so highly organized that conciliatory arbitration can be demanded and enforced.

QUESTIONS

1. How may a labor organization be defined?
2. What are the essential characteristics of a labor union? A trade union? An industrial union?
3. Give a summary of the conditions giving rise to labor organizations.
4. Into what periods may the growth of labor organizations be divided? Give an account of each.
5. Tell about the Knights of Labor. The American Federation of Labor.
6. Mention some of the most important things for which the Federation stands.
7. What is said about collective bargaining?
8. What is meant by a joint conference? By a trade agreement?
9. What is said about compulsory arbitration? Of state boards of conciliation and arbitration?
10. Define a strike. A lockout.
11. Give a brief account of the history of strikes.
12. What have been the principal causes of strikes? What proportion have been successful?
13. What is meant by a boycott? By a blacklist?
14. What are some of the different forms of boycott? Are they legal?
15. What is said about the closed shop?

16. In what ways may there be restriction of output?
17. What forms of restriction may be justified?
18. What restrictions are unjustifiable? Why?
19. Give an account of the benefit features of trade unions.
20. What influence do they exert on trade unions?
21. Summarize the conclusions regarding organized labor.

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CHAPTER VIII

UNEMPLOYMENT

I. The costs of unemployment.
   1. Economic.
   2. Individual and social.
II. The extent of unemployment.
III. Causes of unemployment.
   1. Personal.
      a. Physical incapacity.
      b. Industrial inefficiency.
   2. Industrial.
      a. Seasonal fluctuations.
      b. Cyclical fluctuations.
      c. Other irregularities of employment.
IV. Remedies suggested.
   1. Lessening the number of the unemployable.
   2. Lessening the number who are unemployed because of personal causes.
   3. Lessening the number who are unemployed because of industrial causes.
      a. Establishment of public employment exchanges.
      b. Systematic distribution of public work.
      c. Regularization of industry.
      d. Unemployment insurance.

The costs of unemployment. — The problem of unemployment is one of the most serious that confronts the people of the United States to-day. Although this question has so direct a bearing upon both the economic and social welfare of the people, we have gone on in our indifferent, heedless manner, with but little thought of the extent of the problem, and making no systematic efforts toward its solution. Unemploy-

ment, or irregularity in employment, not only affects the welfare of society from an economic and social point of view, but also exerts a most unwholesome influence upon the individual.

Economic. — From an economic point of view, unemployment means an enormous waste of one of the three great factors in wealth production, labor. For large numbers of able-bodied men to remain in idleness or to be only irregularly employed, means a corresponding decrease in the total amount of wealth that is being produced. It also means that these men must live on what has been produced. Hence the total amount of wealth available for distribution is very materially lessened. Again, in lessening the labor power, the total amount of the various commodities produced is lessened, and this means that we shall all have to pay higher prices for these commodities or else be deprived of them. Thus we have in our economic life the serious anomaly of thousands of strong, able-bodied men wanting work, yet remaining in enforced idleness, while thousands of families are suffering for the want of the products of that labor. A large number of unemployed has a further effect upon industry in that not receiving wages, their purchasing power is lessened, which tends to lessen the demand for goods. This, in turn, lessens the demand for labor.

The four million who were unemployed in the United States in the winter of 1914–15,[1] or the seven hundred and fifty thousand in our coal mines,[2] who year after year are employed on an average only about two thirds of the time,[3] during their periods of unemployment are not adding to the total amount of wealth that is being produced in the country, and are living on what has been produced. In both of these ways they are lessening the total amount of wealth that would otherwise be available for distribution. At the same time their purchasing power is curtailed, and this means a lessened demand for other goods, with a consequent

lessened demand for labor in the production of these goods. The magnitude of the economic phase of this problem can only be realized by concrete figures. Consider the cost to society in lessened production of the four hundred thousand men in New York City, whose ordinary productive capacity at a very low estimate would probably be from $1.50 to $2 per day. The cost to society of this number living from what has been produced averages from twenty-five cents to a dollar a day per individual, to say nothing of the cost to industry through the lessened demand of the four hundred thousand men for the products of industry. Thus we see that the economic life not only of those who are themselves unemployed, but of all society as well, is seriously affected.

Individual and social. — The question of unemployment from an individual and social point of view is perhaps even more important than from the economic point of view. Nothing is more demoralizing to an individual than idleness, and "an idle nation like an idle man inevitably drifts toward degradation." [4] The workingman who is regularly employed and is regularly receiving his wages can lay aside a definite portion of his wages and establish a home. The casual laborer during his periods of idleness uses up what he has been able to lay aside while employed. Also, the workingman who is only employed at irregular intervals tends to form habits of idleness, and it becomes increasingly hard for him to apply himself to any regular work. There is always a greater tendency toward various forms of dissipation on the part of those suddenly thrown out of employment, and many and various ways of spending their earnings make an extra appeal to men when restless from enforced idleness. Society in turn is affected by the demoralizing influence that irregularity of employment has on the individual laborer. Not only are the ranks of the discontented greatly augmented by those who are out of work,

but also many of the crimes against society are committed by them. Many of those who are unemployed have been working along at a very low wage; hence the lack of work for even a short time makes them dependent upon others. The cause of a large amount of poverty in the country is lack of employment. The presence of a large number of unemployed tends to lower the standards of those employed. It means a lower grade of labor and an underbidding in the labor market. This makes it the more difficult for the labor unions to keep up the standards in the various trades. Thus we find that in these various ways unemployment and irregularity of employment not only have a serious effect in weakening the individual and making him less capable of sustained effort in any line of work, but they also add materially to the burdens of society through intensifying the problems of intemperance, crime, and poverty.

The extent of unemployment. — Although we have no exact figures on the total amount of unemployment in the United States, we do have figures from which fairly reliable estimates may be made, — figures which conclusively prove that this is an enormous problem with which we have to deal. The total number of unemployed will vary greatly from year to year, fluctuating with periods of industrial depression and prosperity. There are also seasonal fluctuations, many more workers being employed during some months of the year than during others.

The United States Census for 1900 showed that nearly six and one half million working people, or nearly one fourth of those engaged in gainful occupations, had been unemployed for at least some time throughout the preceding year; and that of this number about one half lost from one to three months of work, more than one third lost from four to six months, and about one eighth lost more than six months. If we consider that each individual lost, at a

very low estimate, ten dollars a week in wages for the time he was out of work, this would mean a total loss in wages of approximately one billion dollars a year.[1] Unfortunately the returns of the last census on this subject have not been published.

However, a study of the schedules of the 1910 Census of a thousand wage-earners from each of six different industrial centers of the United States shows that more than one third (36.1 per cent) were unemployed on an average of 10.8 weeks throughout the preceding year. This is leaving out of consideration all unemployment due to sickness and other incapacity for work, vacation periods, time loss because of strikes, or any form of voluntary idleness; and shows that even leaving these out of consideration, there is still a loss of seven and one half per cent of the productive capacity of the group under consideration. Of those unemployed, about two thirds were unemployed more than one month; about two fifths were heads of families; about two fifths were between the ages of twenty and thirty years, or just at that age when they should be the most valuable as productive workers, and when regular employment is most essential.

The Federal Bureau of Labor carried on an investigation in 1901 covering over twenty-four thousand families of the working classes scattered throughout thirty-three states. This investigation showed that approximately one half of the heads of families had been unemployed for nine and a half weeks during the year. The records kept by trade unions in those states where labor is highly organized likewise show a very large amount of unemployment. In New York, where careful records are kept of the conditions of employment of those belonging to the trade unions, averaging about one hundred thousand workmen, the average number unemployed each month was nearly one fifth of the total number, 18.1 per cent.[1]

Photo by Underwood and Underwood

THE NEW YORK BREAD LINE.

A very careful canvass of conditions in New York City made in the winter of 1920–21 by the Federal Bureau of Labor Statistics afforded a basis for estimating that there were four hundred thousand unemployed in that city alone. An estimate made January, 1921, by the Secretary of Labor placed the number of unemployed in the country at three and one half million. The A. F. of L. estimated the number at 4,000,000.

When we consider the number of unemployed as given in the reports of the United States Census, in the reports of the trade unions of the different states, and in the reports of the special investigations which have been made, it would seem that the conclusions reached by Carroll D. Wright some years ago in regard to unemployment in Massachusetts would be a fairly close estimate of conditions as they are to-day. From the data collected in a special census in that state, he arrived at the conclusion that "about one third of the total number of persons engaged in remunerative labor were unemployed at their principal occupation for about one third of the working time. The total loss of available labor would therefore appear to be about one ninth." [5]

Causes of unemployment. — The causes for unemployment may be divided into the two general groups, personal and industrial. The personal causes may again be grouped under physical incapacity and industrial inefficiency.

Personal. — Sickness is the cause of much loss of time of the workers engaged in all occupations, although, of course, it varies with the different occupations, some being much more healthful than others. It has been estimated that the average individual loses about thirteen days each year on account of illness.[6] Occasionally epidemics take a considerable number of workers from their regular employment. Bad housing conditions and working in poorly ventilated factories or in places where there are great extremes of temperature, working for long hours, and for wages insufficient to provide the proper amount of nourishing food, — all

these tend to weaken the wage-earner's power of resistance, and hence increase the number of days which he must lose from his regular work because of sickness. Accidents are another cause of temporary unemployment for a greater or less length of time. It is estimated that about two million workmen are injured each year in various industries throughout the country.[7] Although we do not know the loss of time that these injuries would cost the wage-earners, the total time loss for the two million would amount to a very considerable sum. It is estimated that in 1913 there were approximately seven hundred thousand industrial accidents among American wage-earners involving a disability of more than four weeks.[8] It not infrequently happens that the wage-earner who, because of sickness or accident, is thrown out of work, loses his position permanently, and after his recovery further time is lost in seeking new work.

The industrially inefficient make up a very large number of those who are out of work. In any industrial concern or business enterprise, the inefficient are the first to be dropped from the pay rolls. Various types of the industrially inefficient are found in every community. There are many different causes of this inefficiency. There are large numbers of the mentally incapable, those who have not the intelligence for carrying on ordinary work. The high-grade morons would be included among these. Another large class is made up of those who have had inadequate preparation for industrial pursuits. A large number of child laborers going into the factory and workshop at an early age become stunted in body and mind, and reach maturity without the health or the knowledge and training necessary to compete in the industrial world.

The "blind alley" occupations are important factors in augmenting the numbers of the unemployed. Many young persons start in the street trades and in other lines of work at an early age. Although for the time being they may

receive comparatively high wages, yet when they reach adult life, their places are in turn taken by other younger persons and they find themselves stranded in the industrial world. They have had no training which might fit them for any occupation, and their early experience in these "blind alley" occupations has unfitted them for any steady work. They gradually drift into the ranks of the casual workers, and ultimately into the vagrant class.

Another class of the industrially inefficient are those who through various forms of dissipation lose not only the inclination but the power to apply themselves steadily. The individual at first loses a few days at a time, but as intemperate habits grow on him, more and more time is lost until eventually he becomes unfit for any regular work. It is for this reason that many of our industrial concerns are taking such a strong stand against the sale and use of liquors. The use of cigarettes likewise tends to stunt the moral and physical growth and materially lessens the chance of an individual's becoming industrially efficient. This fact, too, is recognized by many large industrial and commercial firms that refuse to take any person into their employ who is known to be addicted to this habit.[9] Thus we see that there are many closely interrelated personal factors affecting an individual, and influencing the regularity of his employment.

Industrial. — By far the greatest amount of unemployment is due to industrial causes. These are quite independent of individual or personal causes, and are inherent in the present organization of our industrial system. Among the more important of these may be mentioned the seasonal fluctuations in the demand for labor, the cyclical fluctuations, or periods of trade depressions, and the irregularity of employment in various industries.

A most serious cause is the seasonal fluctuation that is found in certain industries. One of the best examples of the larger distinctly seasonal industries is that of canning and

preserving. The fruits and vegetables are gathered in the summer and early autumn and must be immediately cared for. In September about one hundred and fifty-five thousand are employed in this industry in the United States, while in January only about twenty thousand are so employed. The making of brick and tile is another industry showing distinctly seasonal fluctuations. In July there are one hundred and thirty-five thousand employed, and in January only thirty-eight thousand. The glass industry shows nearly as great variation, but in this the greater number are employed in winter, there being eighty-one thousand in December, and about forty thousand in July. In the manufacture of ice, beet sugar, straw hats, and a number of other commodities, the greatest demand for labor is during a comparatively short season of the year.[10]

The building trades furnish another example of an industry where the demand for labor fluctuates with the change of seasons. Many more are employed in trade and commerce along the Great Lakes during the summer than during the winter months, great numbers of the sailors and longshoremen being thrown out of work with the closing of navigation. The lumber camps likewise furnish work for large numbers of men who are thrown out of employment when the snow melts in the spring. The harvest fields, from Oklahoma up through the Dakotas and extending into Canada, demand a large number of laborers, although only for a comparatively short part of the year.

As a result of cyclical changes there is a much greater demand for labor some years than others. Periods of crises, or industrial depressions, invariably result in the closing down of a large number of mills, mines, and workshops, and the consequent throwing out of work of many employees. For some decades past about every eight or ten years our country has suffered from a period of hard times, large numbers being thrown out of employment. The

financial panic of 1907 was followed by a marked curtailment in the demand for labor in a great many different fields; and, again, in 1919, reports from all sections of the country showed that conditions for the wage-earner were less favorable than for the several years previous to this time.

There are also certain other irregularities of employment belonging to neither of the foregoing classes, which are quite extensive. In the manufacture of lumber and timber products, ninety thousand more persons were employed in November, 1909, than in January, while in the foundry and machine shop products, one hundred and seventeen thousand more persons were employed in December than in January. Many other industries show fluctuations of from ten to fifty thousand in the number employed during different months of the year.[10] In a number of these industries the irregularity of employment is due mainly to the seasonal fluctuation in the demand for their products. The mining industries all show great irregularity in the employment of labor. Coal mining is one of the worst offenders from this point of view. In this industry about eighty thousand less were employed in May than in December (1909).[11] Far more serious than this seasonal fluctuation is the irregularity of employment, many mines operating only part of each week or each month. During the best years coal mines are idle about one fourth of the time, while for a number of years past they have averaged just about two hundred days each year. This means that the seven hundred and fifty thousand wage-earners employed in the coal mines of the country are in enforced idleness about one third of the time from year to year.[3]

There are occasional causes which may throw large numbers out of work for a greater or less length of time. Strikes and lockouts may tie up industry in given localities, and hence add to the number of unemployed. Changes in styles and customs cause fluctuations in the demands for labor each year;

and the introduction of new machinery has not infrequently thrown large numbers out of work, temporarily at least.

Our own government — federal, state, and local — is responsible for a very considerable amount of unemployment because of the haphazard way in which it takes on and dismisses its employees. From 4 to 5 per cent of the wage-earners of the country are in the employ of the government; and yet, in spite of our civil service regulations, large numbers are frequently dismissed suddenly and no effort is made to adjust their being thrown out of work to the demands for workers elsewhere.

Remedies suggested.[12] — *Lessening the number of the unemployable.* — In the first place, careful distinction must be made between the unemployed and the unemployable, between the wage-earner who honestly wants work and cannot find it, and the shiftless, inefficient individual who is unable or unwilling to work even when opportunity offers. Perhaps the most conspicuous example of the unemployable is the large class of habitual vagrants. We have no means of knowing the number that belong to this class, although they are more or less numerous in every community. Neither can we measure the extent to which society is to blame for this class. A society which permits its children to leave their schools and go into the factory and workshop at from ten to fourteen years of age, with little or no training for any regular occupation, a society which permits large numbers of its young people to pass through the formative period of their lives constantly surrounded by those influences which tend to weaken both their physical and moral natures, cannot expect otherwise than that a large number of these young people will drift into the ranks of the casual laborers, and from thence into the ranks of the habitual vagrant, and not infrequently into those of the habitual criminal. Unemployment itself influences many toward becoming unemployable.

From what has been said it is apparent that the only effective way of remedying this situation, of lessening the number of unemployables, is through preventive measures; that is, by remedying those conditions which tend constantly to swell the ranks of this class. Those who have already become incapacitated for work must be cared for by society. Those who are able but unwilling to work should be summarily dealt with by every local community. Recently one of our great daily newspapers reported that the public employment office in the City Hall of Minneapolis was overcrowded with men who professed to want work. That day a construction company sent in an appeal for fifty men at $2 a day, but not one man would respond.[13] A short time ago we witnessed the spectacle of a so-called "Army of Unemployed" marching from the Western states across the country toward Washington, claiming that they wanted work. At the same time certain sections of the country were sending out appeals for laborers, and these men, too, refused to accept work when it was offered in the different localities through which they passed. Instead of dealing with this class as vagrants, and sentencing them to work in the wood yard, at the stone pile, or on the roadways, the mayors of several cities met them at the outskirts of the city with supplies of food sufficient for one or two meals, and occasionally provided freight car transportation for them to the next city, and thus the responsibility of coping with this problem was shifted from one community to another. It is a social crime to hand out food, old clothes, or particularly money, to the individual who appeals for such at our back doors. Such indiscriminate giving not only permits this class to live in idleness, often supplementing what they get through begging by petty thefts, but it also encourages others to follow such a life as this rather than to hold to any steady work. Those really in need should not be permitted to suffer. The larger cities can meet the

situation by the combined activities of the different missions and the associated charities. The smaller communities should meet this problem by providing some sort of work by which those honestly in need of a meal or a night's lodging can earn enough to pay for it. Through common-sense methods and coöperation between the different communities the number of this class of unemployables, those unwilling to work, should be materially lessened.

Lessening the number who are unemployed because of personal causes. — When we approach the question of the unemployed who are so because of personal causes, we find that it is impossible to make any list of causes and say that they are exclusively personal. Again, we find that social conditions have a very direct bearing upon the fitness of the individual for meeting the conditions in industrial life. The amount of time lost because of physical incapacity will be decreased as we lessen the number of accidents in industry and the amount of sickness in different communities. Some of our great manufacturing plants and railroad companies are already showing what can be done through conscientious, well-directed effort toward lessening the number of accidents. The " Safety First " campaign has accomplished, and is accomplishing, much, and the application of this idea to our mines and to all phases of industry should greatly decrease the excessively large number of industrial accidents. In the same manner, as we succeed in securing better sanitary conditions under which the wage-earner lives and works, in eliminating certain industrial diseases, and in furthering the advance of medical science, we will lessen the number of days the worker must lose because of sickness.

In lessening industrial inefficiency we must seek more remote causes. We must begin by eliminating child labor, by controlling the blind alley occupations, and by providing adequate industrial training whereby the individual may

become an efficient worker. Our compulsory education laws must be enforced, and the young person of ten, twelve, or fourteen years of age must not be permitted for a mere whim to give up his preparation for his life's work. And, finally, every effort must be made toward eliminating those conditions which have a constant influence toward vice and immorality, and which are therefore constantly leading toward degeneracy and toward lower efficiency on the part of many of our workers.

The whole problem of unemployment, and particularly those phases which have to do more directly with the personal causes, is closely tied up with many of our other social problems, and hence it is only as we meet these various other problems that we can hope to lessen materially the unemployment due to these causes.

Lessening the number who are unemployed because of industrial causes. — We are coming more and more to realize that a very large proportion of the total number of unemployed are unemployed because of conditions which exist in the present organization of industry throughout the country. A very large number of those unemployed are able workingmen, honestly desirous of regular employment, who because of the fluctuations in industry frequently find themselves out of work. These fluctuations over which the wage-earner as an individual has no control are due to the present day haphazard organization of industry. "The labor market is unorganized, resulting in confusion, waste and loss to employers and employees. It means suffering to individual workers and their families, a lowering of the standard of living, impaired vitality and efficiency, and a tendency for the unemployed to become unemployable, dependent and degraded." [14]

Perhaps the most complete program for coping with the subject of unemployment is that submitted by J. B. Andrews, the secretary of the American Association on Unemploy-

ment. The principal suggestions in this program may be grouped under four main heads.

(1) The establishment of public employment exchanges. There is great need of some system of labor exchange whereby the laborer can find without delay the opportunities for work, and where the employer can find available laborers. About sixty public employment exchanges have already been established by twenty-one states, and twenty more by municipalities. There must be a network of such local exchanges united in efficient state systems, the state system to coöperate with the local exchange in every possible way. Private bureaus and exchanges must be supervised and regulated by state authorities. A Federal Employment Bureau would be of great value to the local bureaus in coördinating their work, and in acting as a sort of clearing house for receiving and disseminating information regarding labor conditions throughout the whole country. Such exchanges could be of the greatest value in the dovetailing of seasonal industries, so that workers in an industry of one season of the year could be transferred to those industries requiring the greater amount of labor at other seasons; in publishing bulletins containing information in regard to labor opportunities in different sections of the country; in collecting data from year to year regarding the ages and occupations of those out of work, together with the amount and duration of unemployment, all of which data is essential for an analysis of the whole problem, and as a basis for future constructive work; and, finally, such agencies may be of very material assistance in enabling the laborer to reach the place where there is a demand for his labor.

(2) The systematic distribution of public work. Large numbers of men are employed every year by municipal, state, and federal governments for all kinds of public work. There is no reason why this work should not be systematically distributed over several years, so that the greater de-

mand for labor from this public work would come at the time when the demand for labor from private industry is slackest. Such work as the digging of sewers, the laying of water mains, the improving of roads, bridges, and parks, the erecting of public buildings, the reclamation of waste lands, and other needed public improvements could well be planned far ahead so as to absorb the excess labor of specially slack seasons. Ordinarily less than the full wage should be given for this emergency work, in order that men shall not rely upon it unless it is absolutely necessary. Also, this should be necessary public work and not merely "relief work" or "made work." In this way "the independence and self-respect of the workers are preserved, while necessary and productive work is accomplished for the community."

(3) Regularization of industry. There are great needs for the regularization of industry in the interests of both the employer and the employee; of the employer that he may have the highest utilization of his capital invested, and of the employee to prevent destitution and demoralization. One of our greatest employers of labor says that "one of the great public necessities existing in the United States to-day is an effort upon the part of business men and the public generally, so to organize employment as to decrease fluctuations in the labor market." [4] Much can be done by the employer, by systematizing the transfer of workers between departments; by distributing the output as evenly as possible throughout the year; by developing new lines to absorb the labor of slack seasons; by overcoming weather conditions in various ways; and by coöperating with other employers in the efforts to regularize employment. Also, much may be done by the workers toward securing greater regularization, through systematic coöperation with the employer; and by the consumer and the large wholesalers and dealers through a more considerate adjustment of their orders and pur-

chases. The "Do Your Christmas Shopping Early" campaign well illustrates what may be accomplished in this way through conscious effort.

(4) Unemployment insurance. This is called "the final link which unites into a practical program the four main methods for the prevention of unemployment." We are far behind most of the European countries in developing a system of unemployment insurance. Although this is undoubtedly the most difficult of all phases of insurance, yet the European countries are now succeeding in getting it established on a fairly successful basis. This insurance would not only be of value in exerting great social pressure toward the regularizing of industry, just as workingmen's compensation is exerting a powerful social influence for "safety first"; but it would also be of value to industry itself and to the workers. It is "as important for industry as for the workers themselves, that their character and physique be preserved during periods of unemployment so that they may, when called for, return to industry with unimpaired efficiency, and may be preserved from dropping into the ranks of the unemployable where they will constitute a much more serious problem."

In addition to these four measures aimed directly at the prevention of unemployment, several policies are suggested which would be helpful in the solution of this as of other social problems. Among these are the reduction in excessive working hours on the part of those employed, thereby increasing the demand for the labor of others; the reducing of the number of young workers by excluding those who are under sixteen years of age, and restricting the number of working hours of those under eighteen years of age, thereby lessening the number of unskilled laborers; and by a constructive immigration policy, thereby more properly distributing the large number of immigrants who are constantly coming to this country.

"For the sake of the unemployed men and their wives and children; for the sake of the workers still employed, whose position is jeopardized by the competition of men driven to desperation by hunger to the point where they are compelled to sell their labor power and drag down the level of wages; for the sake of civilized society, whose very foundations are threatened by the physical deterioration and the mental and moral degradation caused by dire poverty — it is of the utmost importance that measures be taken to solve the problem of unemployment without delay." [15]

QUESTIONS

1. What are some of the great economic losses due to unemployment?
2. In what ways does unemployment affect the individual?
3. What are some of the social effects of unemployment?
4. What facts may be derived from the United States Census regarding the extent of unemployment?
5. What conclusions were reached by the Federal Bureau of Labor regarding the extent of unemployment?
6. Give Carroll D. Wright's estimate of the available labor lost because of unemployment.
7. Classify the causes of unemployment.
8. In what ways may physical incapacity be said to be a cause of unemployment?
9. Show in what ways industrial inefficiency increases the amount of unemployment.
10. What is meant by the seasonal fluctuations in the demand for labor? Give examples.
11. What influence has cyclical fluctuation in industry upon unemployment?
12. Mention some of the other irregularities of employment which tend to increase unemployment.
13. What may be done to lessen the number of unemployables?
14. In what ways is society partly responsible for this class?
15. In what ways may society lessen the number of those who are unemployed because of personal causes?
16. How will the establishment of public employment exchanges aid in solving the problem of unemployment?

17. Mention some of the ways by which a more systematic distribution of public works may be secured.

18. What are the principal needs for the regularization of industry?

19. What is said regarding unemployment insurance?

20. What other policies are suggested as helpful in meeting the problem of unemployment?

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CHAPTER IX

THE BLIND AND THE DEAF

THE BLIND.

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THE BLIND

History of the care of the blind.[1] — *In Europe.* — Before the end of the eighteenth century, those persons who were sightless had practically no attention given to their training. Their affliction was regarded as a visitation of the wrath of God, and they were looked upon as a socially distinct class, a class whom it was not only unnecessary but also impossible to help. Being thus neglected, the blind person was very much handicapped as to means of earning a living, and in many cases his only resource was begging. In 1771 the French philanthropist, Valentin Haüy, at an annual fair in Paris, saw the exhibition in front of an inn of several blind men in grotesque attire giving an entertainment for the profit of the innkeeper. He was shocked by the spectacle, and moved to investigate the condition of the blind in Paris. Then he attempted to train and educate a blind boy, and being successful in this attempt, he opened the first school for the blind in 1784. At first this school was supported by private contribution, but in 1791 the government took it under its protection. Vienna, Berlin, and London soon followed the example of Paris, and established schools for the care of their blind. The realization of the duty of society toward her weaker members has grown apace since that time, and now shows itself in the fact that all European countries have schools of this kind, and several have been established in Asia and Africa.

In America, schools for the blind were opened almost simultaneously in the three cities, Boston, Philadelphia, and New York, between the years 1829 and 1831. Modeled somewhat after the one in Paris, these schools soon surpassed the older one. They were started, and remain, as private corporations, but they receive state aid. Since 1837 the different states have established state institutions for the blind. Now there are reported some sixty residential

and day schools, with six hundred and fifty instructors, caring for about five thousand pupils.

The blind in the United States. — *Number.* — At the time when the 1910 census was taken there were 57,272 blind people reported, 32,443 of whom were males and 24,829 of whom were females.[2] This large excess in the number of males who are blind (130 males to 100 females) is due to the fact that the males are affected almost exclusively by certain important causes of blindness, such as injuries in mine explosions and other industrial accidents, and wounds received in military service. Various estimates of the number of blind in the United States at the present time place the figure at about 100,000.[3] These estimates are based on the special investigations which have been made in several of the states, notably in Massachusetts and New York. This does not mean that there has been any large increase in the proportional number of blind in the country, but that because of incomplete returns many were not included in the federal census. Of the total number about 55 per cent are totally blind, and 45 per cent partially blind. Approximately one half of the total blind population, according to the 1910 census, were sixty years of age or over. Of the 100,000 blind, it is estimated that 40,000 might have been saved this affliction by the application of such knowledge as is now available in the medical, social, and industrial fields.[3]

Age at which blindness occurs.[4] — In the analysis of the age at which blindness occurs, it is found that, of the total number of blind, a little more than one eighth were either blind at birth or their vision was totally lost or seriously impaired before the completion of the second year of their life. About one third of the total number became blind before reaching the age of twenty years. This means that two thirds of all the blind became so after they had passed the school age, that is, after reaching maturity.

Causes of blindness. — The great causes for blindness have been enumerated as ophthalmia neonatorum (babies' sore eyes), industrial diseases, accidents, and poor lighting in schoolhouses and places of work. This is a very short list and it must be taken into consideration that there are very many contributory causes. Injuries, accidents, operations, sore eyes, measles, and other diseases, — all account for a certain amount of blindness among children. These causes, with cataract, and old age, also account for much of the blindness that comes to adults. Consanguineous marriages and diseases of the parents, especially the latter, are the chief causes for blindness at birth. Of the total number of blind, it may be interesting to note that scarlet fever was the cause of 622 cases, measles of 1451, and eye strain of 1316, while injuries, accidents, and operations were the causes of 6688 cases of blindness.[5]

Prevention of blindness. — With the gradual development of public care in regard to the blind has come a desire to prevent blindness. This has been the subject of much medical research, and more lately of social investigation and legislation. Of course, some causes of blindness are unknown. Other causes cannot be prevented. We have to deal here with a few of those causes which are preventable. There are so many cases of preventable blindness, and at the same time the cost of maintaining and educating the blind is becoming so great, that prevention of this misfortune has come to be not only a medical and social problem, but an important economic problem as well.

Prevention of ophthalmia neonatorum. — This disease of the eyes of newly born babies should receive special study from those who are seeking to guard against cases of preventable blindness. It is estimated that one tenth of all cases of blindness are due to this disease.[6] In almost every case the physician in charge can prevent its development by merely dropping a weak solution of nitrate of silver into

the baby's eyes. The importance of this has become so widely recognized that several of our states already have laws compelling physicians to do this, and requiring that each doctor be furnished with a vial of nitrate of silver, and directions for its dilution and use. When we consider the number of people who have to go through life blind, never able to enjoy the beauties of the world about them, and so seriously handicapped in their efforts to gain a living, and when we realize that all of this might have been prevented by a little bit of attention to the eyes of the newly born child, we see how necessary it is that every one should understand the importance of these simple preventive measures.

Medical inspection of the schools. — It is necessary also to consider the bettering of school conditions for the child. There are a large number of schoolrooms that are insufficiently lighted, and as a result many eyes are continually strained in the endeavor to read correctly and to write neatly. In our schools also are a number of children who find it a difficult task to keep up with the class in their studies because their eyes are weak or diseased. In many cases the reason for their trouble with their lessons is not recognized by teacher or pupil, and these weak eyes are strained continually in the endeavor to study, until a medical inspector finds the root of the evil in the defective eyesight of the child. Continued use of the eyes under these conditions results often in partial or in total blindness. Hence it is urgent that efficient medical inspection of every pupil's eyes at stated intervals should be provided for by law.

Prevention of industrial accidents and diseases. — Much blindness comes as the result of industrial accident and disease. By using safety appliances on machinery, and by employing all those other measures which, in factory, shop, or mill, work toward the safety of the laborer, many accidents which have formerly resulted in blindness to the worker may be avoided. Care must be taken that factory and mill

shall be properly lighted, that the workman shall not have to strain his eyes unduly in the performance of his task. In those industries where wood alcohol is used, the ventilation of the working rooms must be perfect. As small an amount as two tenths of one per cent of wood alcohol in the air breathed may lead to absorption, and this saturation of the body brings on atrophy of the optic nerve, or blindness.[7] In the drinking of, and in the external application of, wood alcohol, as well as in the inhaling of it, lies the possibility of blindness and death. Care in its use must be exercised, and this care must be stimulated through laws properly enforced.

Through greater care in the treatment of the various childhood diseases which are liable to cause blindness, through the scientific treatment of diseases of the eye, and through greater control of industrial accidents and diseases, it is estimated that at least two fifths of all blindness may be eliminated.[8]

Within the past few years a number of associations have been formed in the various states for advancing the interests of the blind, and for the prevention of blindness. Two of the most important of these, the New York Committee for the Prevention of Blindness, and the American Association for the Conservation of Vision, were recently consolidated under the title of The National Committee for the Prevention of Blindness. Ex-President Taft is honorary president of this association and among the honorary vice presidents are such names as Jane Addams, Ella Flagg Young, David Starr Jordan, Helen Keller, and Senator Gore.

Education of the blind. — *Aim.* — In the United States we are educating blind persons with the increasing purpose of making them industrially efficient and self-reliant. It is not to be expected that every one of them will become self-supporting, but education is given them with this optimistic aim in mind, and the instructors of the blind in this country

are doing everything in their power to give them elementary and high school education, and to fit as many as possible to make their own way in the world.

Number who have attended school. — Our backwardness in providing adequate and compulsory educational facilities for the blind is indicated by the fact that in the census report, nearly one half of the total were reported as never having attended any kind of school.[9] At the present time one of the greatest difficulties in those states where adequate provisions have been made, is to prevail upon the blind to take advantage of the opportunities offered. They are naturally reticent about venturing out into new fields; and in many cases the parents cannot be prevailed upon to permit the child, and particularly the young child of beginning school age, to leave the home. Although this is a perfectly natural feeling on the part of the parent, it is most detrimental to the interests of the child. As before stated, there are now about five thousand blind people in schools in the United States.

Special schools necessary. — It is quite essential both from a humanitarian and from a social point of view that the blind should be educated. They cannot be taught advantageously in the common schools, however, for two reasons. First, the common schools do not have the necessary equipment for teaching the blind. Being deprived of the sense of sight, the blind must learn through hearing and touch. This means that in the teaching of reading and writing, raised letters or symbols must be used, in the teaching of geography, relief maps and globes, and for all their work specially prepared books must be provided. Since there is only one blind person of school age to every four thousand people of that age in the country, public schools have not on hand the necessary apparatus for teaching this class.

Secondly, knowledge obtained without the sense of sight must necessarily come more slowly, and much individual at-

tention must be given the pupil who cannot see. Hence the progress of other children would be retarded. It is for these reasons that it is so important that special schools be provided for the education of the blind.

Special day schools for the blind have been established in several of our larger cities; notably, New York, Chicago, Milwaukee, and Cleveland. The advantages of these schools are that the child may remain at home while pursuing his education; and that he "is brought in constant, daily contact with the seeing child, learns to get the viewpoint and ideas of these seeing children, and so becomes one of the real world instead of a member of a segregated and peculiar world." The first is a very real advantage, although in the larger cities the home may be so far from the school as to make attendance difficult. The second advantage is possibly more apparent than real, in that the blind child, though associated with other children in the classroom, yet is isolated. He cannot enter into their work or their play as one of them, hence there is not that broad basis of equality which is found in the larger institution where all the children are blind. The greatest difficulty with the special day school is the expense involved in securing adequate books in the raised print, and adequate equipment for their work in musical instruction and for the industrial work. These are of very great importance and the blind should be in institutions where the best and most modern methods of instruction can be employed, the most modern material obtained, and where they can be assured of skilled instructors who understand the necessities and requirements of the blind child. Such institutions can only be provided by the largest cities, or, more appropriately, by the states.

Departments of instruction. — The kindergarten is even more important in the training of the blind child than it is for the one who can see. The blind child in the home is apt to be neglected, or else unduly coddled. Not being able to

play with the other children, he does not learn through playing as does the normal child. He tends to withdraw to himself, and becomes dependent upon others rather than self-reliant. He forms mannerisms or " blindisms," as they are sometimes called, which distinguish him from other children. Inaction in the home is also apt to lead to a weakened physical condition. Very frequently the parents either have not the time or are not qualified for the training of the blind. Since the blind child has to rely so largely on his sense of touch, it is very essential that this sense be trained and developed. The functions of nurseries and kindergartens, as summarized by Helen Keller, are: " (1) to furnish the blind child with many ideas and experiences that come to the normal child without special instruction; (2) to correct the evils that result from being coddled at home; (3) to conquer nervous habits and avert their bad effects; (4) to sharpen and train hearing and touch; (5) to strengthen the body by means of exercise." [8]

Departments of instruction. — In most of the schools for the blind the work is divided into the three departments, literary, musical, and industrial. The course of study in these schools corresponds very closely to the course of study in our grade and high schools. The principal difference is in the method, and in the apparatus that is used. The first book for the blind was published at the Paris institution in 1786, and used the raised Roman letter. The raised letters were difficult to read, and could not be written by the blind pupil. They have been almost completely superseded by the Braille system. This was invented by Louis Braille, a blind musician in Paris, in 1829, and consists of various combinations of six raised dots arranged in a group three points high and two wide (⁚ ⁚). In the United States two modifications of this system are used, the American Braille, and the New York Point, the latter differing from the Braille in that it uses letters two points high and three wide, and the

Courtesy Dr. James J. Dow

WORK DONE BY THE BLIND.

letters occurring the most frequently are made with the fewest dots. The great advantage of the Braille system over the raised letter is that it is writable. By means of a small frame and a stylus, the blind person can indent the points representing the different letters in the paper, and then by reversing the paper he is able to read what he has written by following the raised points with the finger. Typewriters in the point characters are now used by many of the blind. Various mechanical devices are used to assist the pupil in arithmetic and geometry, although, as Helen Keller says, for these subjects "the best instrument is the brain, in which figures can be written on the memory and combined and erased with ease." [8] Geography is readily taught by means of raised and dissected maps, and anatomy by the use of manikins which can be taken apart. In teaching the other subjects no particular difficulty is encountered, as texts in the point system are now printed for practically all subjects.

Industrial training has become a most important phase of the education of the blind. Manual training is begun in the first grades, and as the students advance, they are trained in "broom, hammock, and net making, in cabinet work and chair caning, in reed, willow, and straw basket work, in the weaving of carpets, rugs, coverlets and other art loom work, in hand and machine sewing, in knitting, and in various other kinds of fancy work."

Not only is music a source of great pleasure to the blind, but it also furnishes many of them with a means of livelihood. Most of the schools now have a music department in which instruction is given on the piano and pipe-organ, band and orchestral instruments, in singing, harmony, and also in the art of piano tuning and repairing.

In educating the blind it is important that everything shall be done to make them as much like the rest of the community as is possible. For this reason it is preferable that for their higher education they associate with those who

can see. Many blind people have taken the regular academic and professional courses in the colleges and universities of our country. There has been some demand for the establishing of a national college for the blind, such as the one that has been established for the deaf. Some feel, however, that in order that the blind may have more complete association with other people they should be assisted in their collegiate work by means of scholarships as is done in New York, Minnesota, and several of the other states. These states offer scholarships of three hundred dollars in the different colleges of the state, as an aid to blind students who are working for a higher education.

Through the initiative of Dr. J. J. Dow, Superintendent of the School for the Blind at Faribault, a new movement has been inaugurated in Minnesota for the training of the adult blind. There is probably no class more helpless nor hopeless than the adult who has been suddenly deprived of his sight. Many are entirely unable to carry on those activities in which they were formerly engaged. For this class, a summer school has been provided at the state school, extending through the vacation period. These adults are instructed in reading and writing by touch, in the use of the typewriter, and in different kinds of industrial work. They are also taught to wait on themselves, and thus to become more independent. Some are taught trades by means of which they can afterwards make their living. Dr. Dow in his report of this work says that "enough persons who were heretofore dependent have been rendered self-sustaining through their attendance at the school to assure the state of the entire remuneration of the expenses incurred in the maintenance of the school. But it is not in this way that its real value is to be measured. It has brought to many a new view of the possibilities of life yet remaining to them, in spite of the affliction which has come upon them. It has made quite other men of them, giving them a certain con-

fidence in themselves and hopefulness in their condition, which has been a startling revelation to their families." [10]

Several states have provided a home teacher for their blind, one whose duty it is to go to the homes and there assist and encourage the blind in every possible way. They not only teach the blind how to do many things about the home, and possibly find some occupation at which they can be employed, but they are also able to make many useful suggestions to the seeing members of the household, regarding their attitude and helpfulness toward the blind.

Libraries. — A very great boon to the blind is the large number of books and periodicals which are now being printed for their use. The American Printing House for the Blind at Louisville receives $10,000 a year from the United States government for books which are distributed to the various institutions. According to a recent law (1904), these books are carried by the United States mails free of postal charges. Consequently the blind, no matter where they may be living, may receive and return these books entirely free of charge. The library of the state school for the blind ordinarily serves as the distributing center of these volumes within the state.

The blind in industry. — *Number of blind in occupations.*[11] — Of the number of blind people in the United States ten years of age and over, one fifth, or 20 per cent, are reported as engaged in gainful work. The per cent of our whole population so employed is 50.2. This means that five out of every ten people in the country are working for a living, and two out of every ten blind people are engaged in pursuit of the means of livelihood. Of the blind wage-earners, 42 per cent are engaged in agricultural pursuits, 11 per cent in professional work, 14 per cent in domestic and personal service, and 33 per cent in trade, transportation, manufacturing and mechanical pursuits. The one striking thing about these figures is the comparatively large number engaged in professional service. The

percentage of our total population thus engaged is 4.3. The broom-making industry employs the largest share of the blind engaged in manufacturing pursuits. Other important industries of the blind are basketry, weaving, cordage, mattress making, brush making, and chair caning. Among the more talented blind we find organists, piano tuners, lawyers, and teachers. Now that more attention is given to the training of the blind, it is probable that other occupations will be opened to them.

Workshops established. — Maryland, Massachusetts, and Wisconsin have established non-resident workshops for the blind. Several of the other states have established institutional workshops. Those industries which can be most advantageously followed by sightless persons are pursued in these shops. The aim is to furnish them with some work which they can do, and which is lucrative, in order that as many blind persons as possible may be self-supporting. Usually persons who can see are employed to do that part of the work which cannot advantageously be done by the sightless. These persons teach the blind man the trade, if that is necessary, get together the materials for work, and have the supervision of the shop. One of the principal features of the non-resident workshop is the enabling of the blind to live at home, and thus to preserve home ties. Instead of the state giving them money outright, they are helped to become independent without being cut off from family life.

Employment agencies. — Even though it is not probable that all of the blind will find it possible to compete successfully with those who see, yet an increasingly large number are becoming self-supporting. Some have won notable success in politics, literature, music, and in business. Others have succeeded in making a good living in the various trades. A great need at the present time is that of a fuller understanding of what the blind can do. Many who are well qualified

find it difficult to secure a position, because the blind have so long been looked upon as a helpless class that employers lack confidence in their ability. Consequently an important duty of the institution for the blind is to secure satisfactory positions for those suitably prepared. A number of institutions have employment agencies to assist the blind in securing positions; also many have field agents who confer with employers, and in other ways assist the blind in finding work. As a result of the movement toward the better training of the blind, and of the efforts of these agencies to find a place for them in the industrial life, they are becoming less and less objects of pity and neglect, and more and more not only economically independent, but also useful citizens of a community.

Summary. — The work that is being done for the blind and that needs to be done has been best summarized by Helen Keller. She says that "The collective functions of the agencies at work for the blind are: (1) to prevent blindness and disseminate a knowledge of the methods of prevention; (2) to teach the public about the blind; (3) to found adequate nurseries, kindergartens, and schools, and improve such as exist; (4) to open workshops in populous centers, and to systematize the marketing of the products of the sightless; (5) to help the blind worker over the days when he is establishing himself in business, and to provide the materials of his work at minimum cost; (6) to seek out the blind in their homes and teach them reading, writing, and handicrafts; (7) to find a greater variety of paying occupations in which the sightless can engage; (8) to register all blind children and see that they find their way to the institutions provided for them; (9) to reach the blind in their isolation, and inform them of the possibilities of their blindness in order that they may avail themselves of the advantages already provided and of the enlightening experience of other blind persons." [8]

THE DEAF

History of the training of the deaf.[12] — In the ancient world, the deaf were looked upon as being without the possibility of help. Because they were not able to hear and speak, it was taken for granted that nothing could be done toward their education or toward the bettering of their condition. The first instance that we have of a teacher of the deaf is a Benedictine monk in Spain in the sixteenth century. The first school for the deaf was established at Paris in 1760. A few years later similar schools were established in Great Britain and Germany. The first one in the United States was established by Gallaudet at Hartford, Connecticut, in 1817. Throughout the past century, great advance has been made in the methods of teaching the deaf, and in the opportunities afforded them for an education. At the present time, about 14,000 deaf pupils are in the one hundred and fifty schools of this country. Of these schools about three sevenths are state boarding schools, the same number are day schools, and one seventh are parochial and private schools.

The deaf in the United States. — *Numbers.* — Deafness is such a relative term that no accurate statistics are to be had regarding the number of deaf in the United States. The Census of 1900 gave the number as approximately ninety thousand. It is probable that the number at the present time is somewhat in excess of one hundred thousand, or somewhat above the total number of blind in the country. While the proportion of blind is undoubtedly decreasing in the more advanced countries, the number of deaf remains in about the same proportion to the total population.

Of the total number of deaf, a little more than two fifths (42 per cent) are classed as totally deaf, and the remaining three fifths (58 per cent) as partially deaf.[13]

Age at which deafness occurs. — In considering what can

and should be done in the education of the deaf, it is essential that we should know the relative number who are deaf from birth, as compared with the number who become deaf after reaching maturity. Of the total number about one fifth (18 per cent) were born deaf; two fifths were either born deaf or became deaf before reaching the age of five years; and three fifths (59 per cent) before reaching the age of twenty years.[14]

Ability to speak.[15] — Persons who are born deaf are naturally also dumb, but this is a consequence of the deafness rather than a defect in itself. The deaf-born child remains dumb because, never having heard sounds, he does not know how to make them. The normal child learns to talk within the period of from two to five years of age. Consequently if deafness occurs before the age of two, the child remains speechless, while if the child loses his hearing when from two to five years of age, he soon forgets how to talk through not being able to correct his pronunciation by hearing others speak, and so becomes a deaf-mute. After the speech habit has become fully established, deafness no longer tends to produce dumbness. A very large proportion (92 per cent) of those who cannot speak became deaf before they were five years old, while about one half of all who are dumb were born deaf. Of the total number of deaf in the United States one fourth were reported as being able to speak "not at all." This proportion is decreasing very rapidly with the introduction, and more widespread application, of new methods for "teaching the dumb to speak."

Causes of deafness.[16] — The cause of deafness varies according to the age period at which deafness occurs. A very large proportion of those losing their hearing under the age of two years are congenitally deaf. For the next age period scarlet fever, meningitis, and other children's diseases stand out prominently as causes. Adenoids is another occasional cause. Among adults catarrh, influenza,

colds, and old age are among the principal causes. It is worthy of note that of the four principal assigned causes of deafness, congenital deafness occurs exclusively at birth, meningitis produces deafness chiefly before the age of five, scarlet fever before the age of ten, and catarrh during adult life.

It is not known to just what extent heredity is a cause of deafness, but the data collected by the last census would seem to indicate that it is an important contributory cause in two classes; those deaf from birth, most of whom are totally deaf, and those deaf from catarrh, most of whom are partially deaf. The tendency to deafness among the children of deaf persons is shown to be more than five and a half times as great as in the case of the general population of the United States. This shows that where there is a weakness that predisposes one toward deafness, this weakness is apt to be passed on to succeeding generations. The influence of heredity is further shown by the fact that the percentage congenitally deaf is nearly three times as great among those whose parents are cousins as among those whose parents are not.

Prevention of deafness. — At the present time we can not foresee as great possibilities in the prevention of deafness as we can in the prevention of blindness. However, with the increased control of hereditary influences, and further restrictions on consanguineous marriages, and with the advance of medical science, it is probable that the proportion of deaf may be lessened quite materially.

Education of the deaf. — But a few years ago it was customary to speak of institutions for the deaf as "asylums for the deaf and dumb." Within recent years, these terms have become quite inappropriate. Since we have come to recognize that the deaf are not helpless, but can be educated quite as successfully as any other class, we speak of these institutions as schools rather than as asylums. Likewise, since

it has been discovered that a large proportion of those who were supposed to be dumb can be taught to speak, we speak of schools for the deaf, rather than for the deaf and dumb.

It is essential that special schools be provided for the deaf because of the special methods which must be employed in teaching them. The ordinary courses of study for the deaf, through the grades and high school, are practically the same as are given in the public schools. Because of his inability to hear the sound of the teacher's voice, and because of the necessity of relying on signs and symbols, the beginning processes of the deaf child's education take more time than do those of the hearing child. After these early difficulties are overcome, the deaf child makes quite as rapid progress in his studies as does the child who hears.

Methods of teaching the deaf. — There are three methods employed in the education of the deaf, the manual, the oral, and the combined. The manual method was the first to be used in the schools of America. In it natural or conventional gestures and finger spelling are used in place of speech. In the oral method, speech is used, that is, the child is taught to articulate and lip reading is substituted for hearing. In the combined method the pupils are taught orally, occasionally being aided by finger spelling and signs. In the manual method the movements of the hands and fingers, rather than spoken words, are used to express ideas. Two kinds of manual alphabet are used: the single handed, in which the letters are formed by the use of one hand, and the double handed, in which the letters are formed by using the fingers of both hands. The sign language consists of naturally pantomimic or conventionalized gestures, by means of which a great many ideas may be expressed. The natural pantomime can be readily understood by any one, while the conventionalized signs must be learned, even by the deaf.

A somewhat bitter controversy has been carried on in

the United States, during the last twenty-five years, over the respective merits of the manual as compared with the oral method. Within the past few years, however, there has been a great increase in the number of those taught by speech, until now in practically every school some classes are taught by the oral method. In some schools the oral has entirely supplanted the manual method, while in others the combined method is used.

In the oral method the instruction is by and through speech. The pupil learns articulation by being taught the movements of the lips, teeth, and tongue, and by feeling with his hand the vibrations of the throat and vocal organs. He not only learns to imitate these movements, and thus to produce the different sounds, but he is also taught to read the sounds produced by others, by carefully observing the movements of their lips. Although it is not probable that all of those deaf from early childhood may be taught to speak, owing to the fact that some of them lack the necessary keenness of perception, yet the number who cannot be so taught is comparatively small.

About three fourths of all the deaf in schools are now taught in the classroom by speech.[17] There is still some opposition to this method, mostly from the adult deaf. The great advantage of being taught orally is that it enables the person not only to talk to others, but also to understand what others are saying through carefully watching the movement of the lips. A large number of those who but a few years ago would have been left to go through life hopelessly dumb, are now able to carry on an ordinary conversation with others.

Day schools.[12] — Within the past few years, a number of day schools for the deaf have been established. More than half of these schools are found in the larger cities of Wisconsin and Michigan. The advantages of the day school are that it permits the pupils to live at home, and that it

does not take them out of their normal social environment. Instead of having only institutional care, they are thrown into contact with others, more as they will be after they have passed the school age. On the other hand, it is not in all homes that adequate attention can be given to the deaf. In many the parents have no proper understanding of the way in which the deaf should be treated, and in others, particularly in some of the poorer homes, the parents may be too busy to give time and attention to the deaf child, and thus leave him much alone and neglected. It is not probable, however, that the day school will ever supplant the state school in the education of the deaf, because of the small number of the deaf of school age in proportion to the population. Based on the general average of deaf throughout the country, we would not find more than one deaf child of school age in a city of about six thousand population. In small schools we could not expect to find suitable provision for industrial training, nor a proper classification of the pupils. For this reason it is evident that only the larger cities could provide anything like adequate facilities for the education of the deaf.

Industrial training. — Manual and industrial training play a very important part in the education of the deaf. Any class deprived of one sense, must necessarily place greater reliance upon the other senses. The more fully the other senses are developed, the less one feels the loss of the one. This training is not only important as better fitting them for their place in society, but is also of material assistance to them in opening up various opportunities for gaining a livelihood. Some seventy-seven industries or trades are now being taught in the schools for the deaf in this country. Many of the deaf follow trades learned in school as a life work, while for others the training they have had enables them to adapt themselves the more readily to other employments. As a rule those who have gone through the

schools are able to go out into the world and hold their own industrially alongside of those who can hear.[18]

Higher education. — Not being able to hear does not necessarily keep a person from attending some of the higher institutions of learning, and some of the deaf are found in colleges and professional schools throughout the country taking regular work along with those who can hear. In 1864, a national college for the higher education of the deaf was established at Washington, D.C. This was first known as the National Deaf-Mute College, but in 1894, at the request of the alumni, the name was changed to Gallaudet College,[19] in honor of the founder of the first American school for the deaf. This college is co-educational, and offers the regular four-year courses leading to the degrees of B.A. and B.S. It also offers a year of preparatory work, and a normal course for those who wish to become teachers of the deaf.

The Volta Bureau. — The Volta Bureau for the Increase and Diffusion of Knowledge Relating to the Deaf was established at Washington by Alexander Graham Bell with the Volta prize, the twenty-five thousand francs awarded him by the French government for his invention of the telephone. It has facilitated research in the causes of deafness and in the possibilities of preventing deafness, and has published the results of the various studies that have been made, in the Volta Review. The Bureau also sends out free literature to any home in which it learns there is a deaf child, with instruction to the mothers as to approved methods of training the deaf child in the home, in speech and speech reading.[20]

The deaf in industry.[21] — The deaf are not handicapped to the same extent as are the blind in the industrial world, but they are able to compete on a nearly equal basis with the normal man. There are very few occupations which are not open to them, although in some deafness is a greater handicap than in others. Of those gainfully employed, about

90 per cent are found in the three groups, agricultural pursuits, manufacturing and mechanical pursuits, and domestic and personal service, about one half of these being in agriculture. About 7 per cent are engaged in trade and transportation. A number are employed as instructors in the schools for the deaf, but aside from these, a very small number are found in professional service. These latter two classes of occupations require hearing and speaking power to a greater extent than do the others. It is generally conceded that rural pursuits, agriculture, horticulture, dairying, and poultry raising are particularly suitable for the deaf. However, many individuals have risen to eminence in practically all fields of endeavor.

QUESTIONS

1. Give a brief history of the care of the blind.
2. What is known regarding the number of blind in the United States?
3. What is said regarding the age at which blindness occurs?
4. What are the principal causes of blindness?
5. What important measures may be taken that will materially lessen the number of the blind? Tell about each.
6. What proportion of all blindness may probably be eliminated?
7. What is said to be the aim in the education of the blind?
8. Why are special schools necessary for the blind?
9. Why is the kindergarten so important in the training of the blind?
10. Describe the alphabets used by the blind. What are the advantages of the point system?
11. Tell of the industrial training for the blind. Of training in music.
12. What provision are some states making for the higher education of the blind?
13. What is being done for the adult blind?
14. What libraries have been established for the blind, and how may they be used?
15. Tell about the blind in industry.
16. How are the blind aided through the establishment of workshops? Through employment agencies?

17. Give Hellen Keller's summary of what needs to be done for the blind.
18. Give a brief history of the training of the deaf.
19. How many deaf are there in the United States?
20. At what age does deafness most frequently occur?
21. What is said of the ability of the deaf to speak?
22. What are the principal causes of deafness?
23. What is said regarding the prevention of deafness?
24. What methods are employed in teaching the deaf? Describe each.
25. Describe the day schools for the deaf.
26. Tell of the importance of industrial training in the education of the deaf.
27. What provision is made for the higher education of the deaf?
28. Tell about the Volta Bureau.
29. Give an account of the deaf in industry.

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CHAPTER X

THE FEEBLE-MINDED AND THE INSANE

I. The mental defective.
   1. The insane and feeble-minded defined and distinguished.
II. Number of mental defectives.
III. The feeble-minded.
   1. Backward child not feeble-minded.
   2. Classification of feeble-minded.
   3. The Binet-Simon test.
   4. Causes.
   5. Prevention.
   6. Feeble-minded in institutions.
   7. Feeble-mindedness and other social problems.
   8. What must be done.
IV. The insane.
   1. Number.
   2. Age and sex.
   3. Causes of insanity.
   4. Treatment of the insane.
   5. Prevention.
V. Cost of mental defectiveness.

The mental defective. — We have in the United States about five hundred thousand persons who are mentally defective. This means that approximately one out of every two hundred of our population is abnormal in thought, feeling, or action. It is quite as impossible to set up any absolute standard in the mental world, as in the physical, and in any society are found all manner of variations from what might be called the normal type. A man may show mental peculiarities, or even be decidedly queer, and yet be abundantly able to care for himself, to look after his own property, and

even to perform his various duties as a citizen. It is only when the individual is unable to care for himself, or possibly becomes dangerous to himself or others, either because of the non-development of his mental powers, or because of the derangement of his mind, that he is classed among the mentally defective.

The insane and the feeble-minded defined and distinguished. — There are two general classes of the mentally defective which should be very carefully distinguished one from the other, the feeble-minded and the insane. When the brain is not developed normally along with the rest of the body, feeble-mindedness results. When, after the brain has developed normally, it becomes diseased, insanity results. In other words, feeble-mindedness is the result of an undeveloped brain, while insanity is the result of a diseased brain. The feeble-minded are so from childhood. There may be a mental development, retarded or slowed down so that it stops and no amount of training is able to continue this process. Hence we speak of feeble-mindedness as arrested development. The insane become so after having passed through the normal stages of development. A person may live a great part of his life, and even show unusual mental powers, and then through some disease of the brain tissues become insane. Hence we speak of insanity as a derangement of the mind.

Number of mental defectives. — From what has been said it is evident that it is quite impossible to know the exact number of either the feeble-minded or the insane. Many who are but slightly abnormal would undoubtedly not be reported at all, while many others, because of the sensitiveness of relatives or friends, would not be reported. A recent investigation in the public schools of New York showed fifteen thousand feeble-minded children, or 2 per cent of the total number of school children.[1] Goddard, one of the best authorities in this country on feeble-mindedness,

says that there are between three hundred thousand and four hundred thousand feeble-minded persons in the United States.[2] It would be a very conservative estimate to place the total number of feeble-minded at three hundred thousand, and of the insane at two hundred thousand, in the United States.

Feeble-minded. — Perhaps the best definition of feeble-mindedness is that it is a "state of mental defect existing from birth or from an early age and due to incomplete or abnormal development, in consequence of which the person affected is incapable of performing his duties as a member of society in the position of life to which he is born."[3] From this definition it is seen that environment has something to do in determining whether or not a person should be classed as feeble-minded; that is, in certain communities where the life is very simple, a person below the average intelligence might be able to take care of himself and mind his own affairs with no particular difficulty; while a person with the same intelligence might be quite unable to care for himself in the more complex life of one of our larger cities.

The backward child not feeble-minded. — In the first place, care should be taken not to confuse the feeble-minded with the backward child. In the backward child the mental processes may take place more slowly. He may be one or two years behind his normal grade in school, but still continue to develop and may become highly successful in life. For this class of children special schools, or at least special classes, should be provided, not only for their own benefit, but also that they may not retard the work of the normal child.

Classification of feeble-minded. — The most important classification of the feeble-minded, and the one now generally accepted, is that which divides them into three groups: idiots, imbeciles, and morons. The lowest grade is the *idiot*, whose intellectual development may stop at any age under

two, but whose mentality never exceeds that of a child two years old. He is practically helpless, and can neither speak nor understand when spoken to. The *imbecile* is of a mental age of from three to seven years inclusive. He can speak, but cannot read with any degree of understanding of what he reads, and cannot write in an intelligent manner. The third class which formerly were called feeble-minded, but which we now call *morons*, have a mental development above that of the imbecile, but one that does not exceed that of a child twelve years of age. The moron has been defined as "one who is capable of earning his living under favorable circumstances, but is incapable, from mental defect existing from birth or from an early age, (*a*) of competing on equal terms with his normal fellows, or (*b*) of managing himself and his affairs with ordinary prudence." [3] It is estimated that about 2 per cent of the school population is feeble-minded, and a very large proportion of these are morons.[4] While the idiot and the imbecile are readily recognized in any social group, the moron not infrequently passes without being recognized as belonging to this class. He may be quite normal in appearance, and able to talk more or less fluently. He may be looked upon as dull, or slow, or ignorant, without its being discovered that he is actually defective. It is this class of defectives who are not so readily recognized as are the idiots and imbeciles, and who are permitted to mingle in society without any special care or restraint, who make many of our social problems.

The Binet-Simon test. — The classification of the feeble-minded on the basis of mental age has been made possible largely through the introduction of the Binet-Simon test. This is a measuring scale of intelligence, and by its use persons may be classified according to their mental age. A person may be thirty years old, but, because of arrested development, his mind may only attain to the "mental age" of a child. The test for each mental age consists in the performing of several

simple tasks which the normal child of that age can easily perform. The mental age of a person is thus determined by the most difficult group of tests that he is able to pass. This series of tests for measuring the intelligence of a person was first standardized and presented to the world by Binet and Simon, at Paris, in 1908. With slight modifications and additions, this system is now being used quite generally in the United States. These tests enable us to classify properly the feeble-minded in institutions, and to determine in our public schools which pupils are below the average, and which ones should be cared for in special institutions. They are also of great value in studying the relation of the feeble-minded to crime, pauperism, intemperance, the social evil, incompetency, and disease.

Causes.[5] — Within the last few years much study has been devoted to the finding of the causes of feeble-mindedness. Several of the institutions now have trained experts, who are not only studying the individual cases, but also tracing back family relationships for several generations. The most important feature of these studies is the amount of evidence collected showing the relation between feeble-mindedness and heredity. A large number of charts have been prepared showing the family history of certain defectives as traced back for several generations. These studies show that a mental defect, or a certain degree of intelligence, is transmitted from one generation to another just as truly and as accurately as are the various physical characteristics, such as stature, or the color of the eyes or hair.

From the amount of evidence collected it would seem that by far the most important of all the causes of feeble-mindedness is that of heredity. It is now generally accepted that from 65 to 75 per cent of all the cases of feeble-mindedness are due to hereditary influences.[6] In the list of causes of feeble-mindedness as published by different institutions, a very great variety is found. These causes

are those assigned by parents or physicians, and include such as neglect, abuse, convulsions, diphtheria, scarlet fever, a fall when a baby, a blow on the head, and many others. A careful study of the family history, however, has shown that a large proportion of these are due to hereditary influences, rather than to the assigned cause.

Among the other causes may be mentioned accidents before, at, or after birth, and disease. Of the diseases which may cause feeble-mindedness, meningitis is the most frequent. There are also certain diseases such as the inflammation of the covering of the brain, the wasting of the gray cells, the softening and hardening of some parts of the brain, the stoppage or weakening of the blood vessels of the brain, and the stoppage of the functioning of the ductless glands, all of which may lead to feeble-mindedness. Drunkenness, immorality, and other vices undoubtedly cause a considerable amount of feeble-mindedness, although the exact proportion due to these causes is not determined.

Prevention. — Our ablest physicians and surgeons hold out no hope that any great numbers of the feeble-minded can be cured. It is true that many cases of retarded development have been helped by the skill of the surgeon, as in the relieving of a pressure upon a certain portion of the brain, or by the physician, as in the giving of relief where feeble-mindedness is due to the absence of the thyroid gland. The number of cases, however, that can be cured or even materially helped by such treatment, is very small. The only effective way of materially lessening the number of feeble-minded is by the cutting off of those hereditary lines through which the numbers are being constantly replenished. There are occasional sporadic cases, sometimes appearing in the best of families for which no cause can be assigned. One of the best known groups of defectives, the Mongolian,[7] is supposed to be entirely free from any hereditary influences. They are so called because of their round faces and slanting eyes, which

resemble the Asiatic or Mongolian type of countenance. This class is more often found in the better families, and in families in which no other defectives are found. Their mentality is almost always that of a four-year-old child. No way of lessening the number of this class is known at the present time. When all the feeble-minded persons in the country are segregated in those institutions which are expressly for their care, and are kept there until they die, never being allowed to marry, then only will we have made any real progress toward wiping out this defect from our midst. It is not expected that we shall ever be able entirely to eliminate this defect. However, through proper segregation, there is no reason why a very large amount of feeble-mindedness should not be eliminated.

Feeble-minded in institutions. — Of the total number of feeble-minded in the United States, about twenty thousand are being cared for in institutions for the feeble-minded, about sixteen thousand in almshouses, about five thousand in hospitals for the insane, and about twenty-six thousand in prisons and reformatories.[8] Manifestly neither the prison nor the reformatory, neither the hospital for the insane nor the almshouse, is the place for the feeble-minded. Only about one tenth of the feeble-minded are cared for in proper institutions.[9]

It was not until the year 1837 that we had the "real beginning of the systematic rational training of mental defectives, which has gone on from that day to this." Before this time there had been two or three unsuccessful attempts to establish schools for the training of the feeble-minded, and in 1835 the first institution for the care of idiots (not for their education) was established in Germany. The name that stands out most prominently in connection with the work for the feeble-minded is that of Édouard Seguin of France. Because he was the founder of the first school for this class of defectives, and because of the impetus which he gave to

KINDERGARTEN CLASS FOR MENTAL DEFECTIVES, RANDALL'S ISLAND.

A GROUP OF MORONS AT WORK AT RANDALL'S ISLAND.

the study and training of the mentally defective, he is often referred to as "The Apostle of the Idiot." After the Revolution of 1848 in France, Seguin came to the United States. He remained in this country, devoting the greater part of his life to personal work in the early American institutions, and to studying and devising methods for the training of feeble-minded children. The first schools in the United States were founded in Massachusetts and New York about 1850, largely as the result of the influence of Seguin and of Dr. Samuel G. Howe, who had become much interested in the work that Seguin had done in France.[10]

It was formerly thought that with time and patience many of the feeble-minded might be so trained that they could take their place along with normal individuals in society. Further study of this class, however, has caused us to become less optimistic. It is now conceded that no amount of training could ever prepare very many, if any, of this class to take their place in society independent of any supervision or restraint. Their weakness being caused by arrested development, there is simply no mental foundation on which to build. This does not mean that their training should be neglected. The most appropriate training for the feeble-minded person is determined by his mental age.[11] For the lowest group, the idiots, about all that can be done is to give them custodial care; that is, to secure for them the satisfaction of their physical wants and to keep them in decent and cleanly surroundings. The next class, the imbeciles, or those with a mental age from two to seven years, can be trained to care for themselves and to do many tasks about the institution. For the third group, the morons, or those of a mental age of from seven to twelve years, training is very essential. Not only can they be taught to do many things of a routine character, but may even acquire a considerable degree of proficiency in the use of tools and farm implements. They have become quite proficient in some of the simpler occupa-

tions, such as carpet-weaving, broom-making, carpentry, painting, masonry, dressmaking, tailoring, and farm work. Many of them can earn good wages at these different occupations when under proper supervision, but they all need this supervision. Large numbers of this class are thus able to contribute quite materially to their own support, and it is estimated that from 20 to 30 per cent, under proper direction, may become fully self-supporting.[9] Most institutions now have a school department where those who have the capacity are taught to read and write, and to do simple arithmetic problems. Much emphasis is placed on gymnastic exercises in the training of these different classes. The exercises are given to stimulate their mental processes as well as to strengthen them physically.

The purpose of an institution for the care of this class has been well summarized by the superintendent of one of the newest state institutions for the feeble-minded and epileptic, that of Letchworth Village. He says that it is: first, a home where the feeble-minded and epileptic of all ages may be given the pleasures and comforts of the ordinary home; second, a school where suitable training will be given to all of school age; third, a laboratory where scientific studies shall be conducted of all questions pertaining to feeble-mindedness; fourth, a workshop where this vast amount of energy can be kept by the state, and utilized in such a way that its charges shall be happy, and society protected.[12]

Feeble-mindedness and other social problems. — The importance of institutional care for the feeble-minded is recognized when we consider the many ways in which mental deficiency is interwoven with some of the most serious social problems of to-day. Four of the greatest social problems that we have before us in the United States are those which have to do with poverty, crime, vice, and intemperance. The welfare of any people is largely dependent upon their success in

the solution of these problems. Much has already been done, and is being done, toward checking the growth of each of these evils. Many of the states have already made provision for those individuals who through their unsocial conduct occasion these blots on our social life, but as yet no state has given anything like adequate attention to real preventive measures.

In considering the question of poverty it is found that probably half of the paupers in our almshouses are feeble-minded.[13] These inmates are there because they did not have the mentality to care for themselves; yet many of them have been permitted to marry and thus to propagate their own kind. Every inmate of every almshouse should be examined as to his mental condition, and when it is found that his being there is due primarily to feeble-mindedness, he should be permanently segregated. In this way future society would be saved from large numbers of those who would inevitably fall into the ranks of the paupers.

In our study of crime [14] we find that about the same proportion, one half, of all criminals are mentally defective. In our prisons probably from 25 to 50 per cent "are mentally defective and incapable of managing their affairs with ordinary prudence." A careful study of the mentality of the inmates of some fifteen of the principal reformatories and institutions for delinquents of the country showed from 60 to 80 per cent to be mentally defective. Many of these people, although from sixteen to eighteen years of age, have only a mental age of from eight to ten years. A careful study, using the Binet test, of one hundred young women recently admitted to Bedford Reformatory, showed that, while their average age was about twenty years and nine months, their average mental age was only ten years.[15] These persons who had only the mental capacity of little girls of ten years had been sentenced to a reformatory rather than to a school for feeble-minded where they belonged. That they

were feeble-minded should have been discovered long before when they were at the beginning of their school period, and provision should have been made for their care in institutions, before they were left on society unguided and unguarded, free to commit those crimes for which they were sent to reformatories. They were feeble-minded, and consequently irresponsible. A tragic phase of this situation is that many of these, after completing short sentences, are again thrust back into their old life only again to commit some crime against society. Every inmate of an institution, particularly of those for juvenile delinquents, should be examined, and, if found mentally deficient, should be cared for as feeble-minded, rather than dealt with as a criminal.

Again, in the study of vice conditions in our large cities we find that feeble-mindedness is a very large factor.[16] A careful mental examination of one hundred and four girls sentenced to the Geneva Reformatory because of immoral lives showed that 97 per cent were feeble-minded. Of the immoral women who live in vice in our cities, it is estimated that at least 50 per cent are feeble-minded. That is, though many of these are adults physically, in mentality they are like children of six, eight, or ten years of age. When we consider this fact we see what a disgrace it is that society has not protected these people, as well as itself, by recognizing their weakness and providing for their care earlier in life. The utter senselessness of fines or short-term jail sentences for this class is very apparent.

Although we do not know definitely just what proportion of feeble-mindedness is caused by alcoholism, or what proportion of alcoholism is caused by feeble-mindedness, we do know that a large proportion of confirmed drunkards are feeble-minded.[17] A person of low intelligence who is lacking in judgment and will power to control his actions naturally is one of the first to yield to any sort of temptation which may beset him. He has little control over his appetite, and

has no understanding of the consequences of indulgence. Inasmuch as feeble-mindedness is the cause of much intemperance, in our attempt at enumerating these evils, we must not overlook this important factor. The drunken sot in many instances should have been cared for long since in some institution for the feeble-minded, rather than now be sentenced over and over again to a short period in some jail or workhouse.

All this does not imply that if we could eliminate all feeble-mindedness, we should cure such evils as poverty, crime, vice, and intemperance, but it does show us that we cannot hope to go very far in the solution of these problems and overlook so important a contributing factor to every one of them as is feeble-mindedness.

What must be done.[8] — In no field of social activity is there greater need of intelligent, effective work than in the care of the mentally deficient. Adequate provision must be made for the nine tenths of the feeble-minded who are now mingling in society under no supervision or restraint, unable to compete on equal terms with their normal fellows, or to manage themselves and their affairs with ordinary prudence. Those in our almshouses, prisons, jails, and reformatories must be subjected to mental tests, and when found to be feeble-minded they must be permanently cared for in institutions for the feeble-minded. Legislation must be passed making it possible to commit and hold the feeble-minded in institutions just as effectively as the insane are committed, for much too frequently parents are either unwilling that a child shall be sent to a school for the feeble-minded, or, after the child has improved somewhat in such a school, the parent too soon takes him back into the home. Further study must be made of the racial and social evils of degeneracy, of the nature and power of heredity; and, above all, every effort must be made to disseminate as widely as possible such facts as we have regarding the prevalence and effects

of feeble-mindedness, and regarding the measures for its prevention.[18]

The insane. — Insanity may be defined as "a disorder of the mind, due to disease of the brain manifesting itself by a more or less prolonged departure from the individual's usual manner of thinking, feeling, and acting, and resulting in a lessened capacity for adaptation to the environment." [19] There are a great many different forms of these abnormal mental states, — so many that it has been suggested that it would be more appropriate to speak of the insanities as representing different forms of insanity, than to use the term in the singular.

Number. — We have said that two hundred thousand was probably a very low estimate of the total number of insane in the United States. The last census showed that in 1910 there were 187,791 persons in institutions for the insane in our country.[20] This does not include the insane in almshouses or prisons, or the large numbers in those states in which no adequate provision has been made for their care. Dr. Barker, president of the National Committee for Mental Hygiene, estimates that there are now about two hundred and fifty thousand insane people in the United States.[21]

There were about four and a half times as many in the institutions for the insane in our country in 1910 as in 1880.[22] This does not mean, however, that the number of insane in the United States has increased in anything like this proportion. The principal reason for this apparent increase is the advance that has been made by the different states in caring for this class, a much larger proportion now being placed under institutional care than formerly. Other reasons [23] for the apparent increase in the proportion of insane are: the more humane and more scientific methods used in the care of those in institutions, which materially lengthens their term of life; the increase in the average length of life of all individuals, which brings many more

people to the age at which insanity is liable to occur; greater skill in detecting the first indications of insanity, and commitment before the insanity has been allowed to reach an advanced stage of development; more adequate provision for the legal commitment of those known to be insane; and, finally, the better treatment of the insane in hospitals, and the better understanding of the work and functions of these hospitals for the insane have led to less aversion on the part of friends and relatives to sending the afflicted to such places. Although these factors may explain away a large proportion of the apparent increase in the number of our insane, the fact still remains that to the present time, at least, insanity has been somewhat on the increase, due to the growing tension of modern life, and to the great increase in our urban, as compared with our rural, population.

Age and sex. — That insanity is almost exclusively a disease of adults is indicated by the fact that the average age when first admitted, of all of those in institutions for the insane when the last census was taken, was about thirty-seven and a half years.[24] It is further indicated by the fact that while the median age of the general population is twenty-four, for the enumerated insane it was forty-four. There are almost ten thousand more men than women in our institutions for the insane.[20] About the same proportion in the excess of males is found in the number of those admitted to hospitals in 1910. This excess in the number of males is due almost exclusively to greater intemperance and immorality on the part of men. When we leave out of consideration these two causes for insanity, the proportion of males and females is found to be almost exactly equal.

Causes of insanity. — There are a great number and variety of causes which may bring about insanity. Some of these causes are very clearly defined, while others are much more complex. Of all causes, undoubtedly the most important is heredity. It is not that a particular form of insanity is

inherited, but rather a mental instability, or a predisposition to insanity. This predisposition toward insanity is not always evidenced by insanity in the family history. This neurotic taint, as it is called, may manifest itself in various mental disorders such as extreme nervousness, epilepsy, hysteria, or merely in erratic or eccentric peculiarities. Again, heredity may be indirectly a cause in many instances, as in the case of a person who has inherited a weak mentality, and who is therefore led more easily into vice and intemperance, which may ultimately cause insanity. Also, the marriage of two persons in whose ancestry there is the neurotic taint, intensifies that predisposition in the next generation. It is impossible to give exact figures regarding cases of hereditary insanity. In many cases relatives or friends of the insane will deny that there is any hereditary taint. In other cases the family histories are not known for more than a generation or two back. It has been estimated that about two thirds of all the cases admitted to insane hospitals occur on the heredity basis.[25]

Perhaps the next most important of the causes of insanity are those growing out of immorality and intemperance. One of the worst possible forms of insanity is that known as general paresis. This is a serious brain disease causing mental and physical decay, eventually ending in death. It is now recognized that this form of insanity is caused by an earlier disease, which in turn is the direct result of vice and immorality. A recent report on the causes of insanity signed by nine of the most prominent medical experts on mental diseases, says that " the number of patients having paresis admitted to state hospitals every year is 20 per cent of all men admitted and 8 per cent of all women admitted." [26] A study of the causes of insanity, as given in the reports of a large number of institutions both in this and other countries, would seem to indicate that 20 per cent is a very conservative estimate of the proportion of insanity in

which alcohol is the direct or indirect cause.[27] In addition to the alcoholic insanities, the effect of alcohol even in small quantities, upon the brain and nerve tissues, is to lower the mental capacity, and it " helps to bring about a number of mental breakdowns." [26]

There are many other poisons, such as opium, heroin, morphine, cocaine, which weaken the mental powers and produce insanity. Certain infectious diseases, such as typhoid fever, diphtheria, smallpox, cerebrospinal meningitis and others, may leave poisons in the system which interfere with the regular functions of the body and cause mental alienation. Tuberculosis, and diseases of the arteries, heart, and kidneys, or injuries to the head may be mentioned among the physical causes of insanity.

Overwork and exhaustion, especially when accompanied by depletion of the blood, may result in mental breakdown. Such causes, and any great mental or moral shock, mental stress or worry, uncontrolled grief, or intense excitement, may bring about a more or less serious derangement of the mind.

Treatment of the insane. — In the history of the treatment of the insane four fairly distinct periods [28] may be recognized. The first period may be characterized as that of neglect. Even down through the Middle Ages insanity was looked upon as a visitation of the gods, the victims often being supposed to be possessed of demons. They were ordinarily left alone unless they were known to be dangerous, in which case they were often treated as witches, and were not infrequently burned at the stake, and in other ways cruelly tortured.

The second period is referred to as the era of detention. This period roughly covers the years from the beginning of the fifteenth to the beginning of the nineteenth century. Institutions were provided in Italy, Belgium, England, and in 1732 in Pennsylvania, for the detention of the insane.

These places of detention were looked upon as asylums for lunatics rather than as hospitals, and most cruel and barbarous methods prevailed in the treatment of the poor, unfortunate inmates. They were often thrust into dark and prison-like cells, or kept in cages like wild animals. They were often compelled to live in extreme filth, with no other bedding than straw, with little or no clothing, and often weighted down with great chains.

The third period is that of humanitarian treatment. It was not until the close of the French Revolution that Pinel inaugurated the movement in some of the French hospitals of treating the insane more as human beings. He removed their shackles, and introduced humane methods to take the place of the barbarities which he found. Since his time more humane and more scientific ways of dealing with this class have been gradually introduced throughout our country, although, unfortunately, even yet we occasionally find insane in our almshouses or jails treated quite as barbarously as in the times before Pinel.

There followed, fourth, the period of the scientific treatment of insanity. We are gradually entering into the period in which we look upon insanity as "a disease and not a doom," — a period characterized by a more humane treatment of the insane; a scientific study of forms, causes, and methods of dealing with insanity; and by the attempt, through the application of medical and social measures, to lessen this disease. Mechanical restraint, and medicinal restraint through the use of narcotics, are now being largely "replaced by hydrotherapy, massage, and other non-medical agents."

Effort is made to remove the patient from the exciting causes which may have provoked the attack, to secure for him rest and change of surroundings, and particularly to build up his physical health. Amusements, recreation, and useful employment are provided for such as can profit by

them. As the result of the introduction of these newer and more scientific methods in the treatment of the insane, nearly one fourth of all those admitted to our state hospitals are cured, and nearly as many more are sufficiently improved to be permitted to return to their homes.[26]

A very great need to-day is for a more complete classification, and segregation of particular classes of the insane, and the providing of separate institutions for these special classes. Special institutions should be provided for the epileptics, and also for the alcoholic insane. Neither of these classes should be included with the other insane, since they each require distinct methods of treatment. Another class which should be dealt with separately is the criminal insane.[29] In most states even to-day no separate asylum is provided for this class, and the insane criminals are sometimes sent to the insane hospitals, sometimes to poor farms, and sometimes to the state prisons, where occasionally separate wards are provided for their care. The more advanced states are now providing suitable institutions to which persons may be sent who become insane while serving a prison sentence, or who are acquitted of crime on the ground of insanity.

Prevention. — It is now estimated that about 40 per cent of insanity is preventable.[26] The large amount of insanity due to hereditary influences may be materially lessened through a more effective segregation of the mentally unfit. As society comes to recognize the part that immorality and intemperance play in causing insanity, it is probable that more effective social action will be taken looking toward the elimination of these two great causes. Although not many forms of insanity are amenable to medical treatment, yet there are certain forms which it is thought may be controlled more effectively with the advance of medical and surgical skill. It is recognized that there is a much greater chance for the cure of insanity when treatment of the patient can begin at, or soon after, the appearance of the first symp-

toms of the disease. The last census report on the insane showed that one third of those admitted to institutions had suffered the attack a year or more before admission, while in nearly one tenth of the cases reported the attack had lasted six years or more before admission to the hospitals. Earlier recognition of the symptoms of insanity, and earlier commitment to hospitals, are important factors in increasing the proportion of curable insane.

Social service [30] is now considered an important adjunct to the proper treatment of the insane. A number of the best hospitals have now organized social service departments. The social worker may help the individual in various ways. A person may become so worried over the fear that he is going to be insane as to be actually in danger of having his fears realized. The social worker through advice and the statement of facts may allay this fear and so check the tendency. He may help to allay a common prejudice on the part of relatives or friends against having a person committed to the hospital, and may frequently give valuable advice regarding the need of medical or hospital care, and the way in which such care may be secured. He may also be of great benefit to the discharged patient, assisting him to find suitable work, and to take his place again in society. As a friend and adviser he may make it possible for certain persons, though somewhat mentally disordered, to carry on their work and support their families, when these persons, without such supervision and advice, would probably have to be sent to an institution. In these ways the social worker, through intelligent advice and friendship, may not only prevent certain persons from becoming insane, but may also be of great assistance in recognizing symptoms, and in securing early treatment for those needing institutional care.

One of the most hopeful signs in connection with the prevention of insanity, is the increased attention that is now being given to the subject. Many of the leading institutions

for mental defectives now have special departments for the study of all phases of mental disorders. Our medical colleges and universities are also giving considerable attention to this same study. In 1909, a National Committee for Mental Hygiene was founded, largely as a result of the work done in this field by Clifford W. Beers, the author of "A Mind that Found Itself." Mr. Beers suffered an attack of mental disorder in 1900, recovering some few years later, and in this book he gives an account of his experiences in various hospitals for the insane. He has since been devoting his time and energy to the cause of mental hygiene. This mental hygiene movement is a well-organized endeavor to lessen the social, moral, and economic effects of mental deficiency. The three main lines of their work are :[31] first, *original inquiry* regarding the present care of the mentally defective, the opportunities for betterment of conditions, and the causes and prevention of mental diseases ; second, *popular education*, the disseminating of information regarding the social significance of this question, together with such information as is now available regarding the care, treatment, and preventable causes of mental diseases ; and third, the *organization of agencies*, federal, state, and local, to coöperate in this work.

Cost of mental defectiveness. — The average annual cost for each patient in institutions for the insane in the United States is about $175. This means that institutional care for the insane is costing the people of the United States more than thirty-two million dollars yearly. In New York, nearly one sixth of the total expenditures of the state is for the insane. This enormous cost is merely for those in institutions, and does not include that of caring for those outside institutions, the many costs before commitment, or the economic loss to society of the earning capacity of this large number of people who are thus taken out of the industrial field.[32] These items consider the cost merely from the standpoint of dollars and cents.

The per capita cost for caring for the feeble-minded is about the same as that for the insane, but the indirect costs to society, of feeble-mindedness, are far greater than those of insanity.

From a social and moral point of view the cost to society of mental diseases and mental inefficiency cannot even be estimated, as this must take into consideration not only the mental and physical suffering of the individual, but also the part that this class plays in increasing the amount of pauperism, intemperance, immorality, and crime, and finally the affliction that is visited upon the future generation through the inheritance of these mental deficiencies. This enormous cost has the greater significance for us when we realize the large amount of both insanity and feeble-mindedness which is preventable.

QUESTIONS

1. How many mentally defective are there in the United States? Who are included in this class?
2. Distinguish between the insane and the feeble-minded. What is the estimated number of each?
3. What is said regarding the backward child?
4. Classify the feeble-minded. Give characteristics of each class.
5. Tell about the Binet-Simon test.
6. What are the principal causes of feeble-mindedness?
7. Discuss the prevention of feeble-mindedness.
8. How many of the feeble-minded are cared for in institutions? In proper institutions?
9. Give a brief history of the training of mental defectives.
10. What training is possible for the different classes of the feeble-minded?
11. What is the fourfold purpose of institutions for the care of the feeble-minded?
12. What is said regarding the relation between feeble-mindedness and poverty? Crime? Vice? Intemperance?
13. Define insanity.
14. How many insane are there in institutions in the United

States? How does this compare with the number thirty years ago? How is this increase explained?

15. What is said regarding the age of the insane? The sex?
16. What are the principal causes of insanity?
17. What four periods may be recognized in the history of the treatment of the insane? Characterize each period.
18. What are some of the newer methods in the treatment of the insane?
19. What percentage of insanity is considered preventable? Through what measures?
20. Tell about social service as an important adjunct to the treatment of the insane.
21. Tell about the National Committee for Mental Hygiene.
22. What is said regarding the cost of mental defectiveness?

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CHAPTER XI

CRIME AND PUNISHMENT

I. What is crime?
   1. Definition.
   2. Classification.
II. Extent of crime.
   1. Statistics.
   2. Increase or decrease?
III. Change in the forms of crime.
IV. Causes.
   1. Individual.
   2. Social.
V. Changing attitude toward crime and criminals.
   1. Retribution.
   2. Repression.
   3. Reformation.
   4. Prevention.
VI. Certain features of the modern treatment of criminals
   1. Classification of prisoners.
   2. Graded system.
   3. Parole.
   4. Indeterminate sentence.
   5. Cumulative sentence.
   6. Probation.
   7. Miscellaneous reforms.
VII. Prison labor.
   1. Lease system.
   2. Contract system.
   3. Piece-price system.
   4. Public-account system.
   5. State-use system.
   6. Public works system.
VIII. The juvenile offender.
   1. The Juvenile Court.

What is crime? — *Definition.* — Crime has been defined as "any act, or omission to act, punished by society as a wrong against itself." [1] From this definition it may be seen first, that a crime may be either an act of commission or of omission, — a violation of the law "Thou shalt not," or of the law "Thou shalt." In the earlier and simpler stages of society, the individual was frequently restrained from doing certain things, the doing of which was held to be against the best interests of society. As society has grown more complex, the individual has not only been restrained from certain acts, but also compelled to do other things, the failure to do which is considered against social interests. Much of modern social legislation is of this positive sort, such as that requiring the manufacturers of food products and patent medicines to label their goods honestly, the factory owner to take due precaution for the health and safety of his employees; and in many instances requiring the individual to do things for the greater common good.

In the second place, the act in itself is not a crime unless it is recognized and punished by society as a wrong against itself; that is, society through conscious action determines what it wishes, or does not wish, done. Some of the most serious offenses are not infrequently continued for a long time before society becomes aroused to the extent of endeavoring to check them. The plundering of our natural resources, and the needless destruction of life and limb in our industries, however serious they may be, are not crimes until they are in violation of the rules laid down by society.

Vice has been defined as an offense against one's self; sin as an offense against God or a transgression of the divine law; and crime as a violation of the laws of man. The most common division of crime is into felonies and misdemeanors. Felonies are the more serious transgressions, such as are punishable by death or imprisonment in the

state prison. Misdemeanors are the lesser crimes such as are ordinarily punished by fines, or imprisonment in the jails or workhouses.[2] The difference between a felony and a misdemeanor is thus primarily in the degree of the offense, and owing to the varying standards of punishment in the different states, what is a felony in one state may be a misdemeanor in another, while in still another state, the same offense, because of lack of legal enactments, might not be a crime at all.

Classification of crimes. — It is almost impossible to give any complete classifications of crimes, because of the differences in the criminal codes of the different countries, and of the various states in our own country. Perhaps as simple and concise a classification as we have to-day, is the one made some years ago by Sir James Stephen in his "History of the Criminal Law in England." He divides crimes into the five general groups: (1) attacks upon public order; (2) abuses and obstructions of public authority; (3) acts injurious to the public in general; (4) attacks upon the persons of individuals; (5) attacks upon the property of individuals.[3]

Another grouping of crimes which hardly aims at a complete classification, but which is very frequently found in the discussions of crime, is: (1) offenses against the state and public order, such as treason, forgery, counterfeiting, and inciting to riot; (2) offenses against the person, such as murder, manslaughter, assault, intimidation, personal injury; (3) offenses against property, such as burglary, robbery, larceny, embezzlement, obtaining money by false pretenses, receiving stolen goods, and the malicious destruction of property.[4]

Extent of crime. — *Statistics.*[5] — Each year about five hundred thousand persons commit crimes, in punishment for which they are committed to some penal or reformatory institution. This by no means indicates the total amount

of crime in the country, for many of those who commit crimes are not apprehended, many others succeed in escaping through the meshes of the law, while still others are let off with mere fines. A prison population is an ever-changing population, the average number at any one time being about one fourth of the total number of commitments during the year. On January first, 1910, the total number of prisoners and juvenile delinquents in the United States was one hundred thirty-six thousand four hundred and seventy-two. Of this total number, there were approximately ten times as many males as females. The proportion of foreign-born was 15.3 per cent, this being slightly in excess of their proportion of the entire population (14.7 per cent). Nearly one third of this total number (42,631) were colored. About 25,000 of the total number were in institutions for juvenile delinquents, the remainder (111,498) being in the prisons, penitentiaries, jails, and workhouses. Of the various kinds of crime for which these persons were convicted, about two fifths were for offenses against property, about one fifth for offenses against the person, and a little more than one tenth for drunkenness and disorderly conduct.

Increase or decrease? — As to whether or not crime is on the increase in the United States, we have no definite information. This is because of the careless way in which data regarding crimes are kept, and because of the fluctuations in what constitutes crime in the different states, many acts listed as crimes in the laws of one state not being crimes under the laws of a neighboring state. While it is true that the total number in our penal institutions has increased within the past few years somewhat more rapidly than has our population, this may indicate an increase in the amount of crime; a greater vigor in the enforcement of the law; or it may indicate that several new offenses have been added, through legislation, to the list of those punishable as crimes. In communities where the general

moral standard is low, many offenses are overlooked which would be punished in communities with higher standards. Also, the public sentiment in certain communities may be out of sympathy with some particular phases of legislation, such as temperance legislation, and consequently make no effort to apprehend the violators of these laws. Thus the number of convictions is not always a true index to the actual amount of crime in any community.

Changing conditions have necessitated a great number of new laws. The development of our factory system has made necessary, laws regulating the conditions of labor. The crowding together in our cities has called for laws regulating the conditions of living. The change in the methods of manufacture has given rise to a great number of laws aiming to protect the public from frauds and deceptions. The introduction of automobiles has brought many ordinances regulating the control of the automobile traffic. We already have laws looking to the regulation of wireless telegraphy, and can even now foresee possible future legislation for the control of aërial navigation. It has been said that within the last twenty-five years more laws have been put on the statute books than during all the previous history of the republic.[6]

A single new law, such as the Pure Food Law, may add thousands of offenses to those punishable as crimes. Judge Gemmill of the Municipal Court of Chicago has pointed out that of the sixteen thousand people of all ages and sexes, who were charged with misdemeanors before the municipal court of Chicago in 1912, more than one half "were accused of violating laws which did not exist fifteen years ago." He very emphatically denies that crime is increasing, and says that "the reason more people are arrested now than formerly is that very often offenses now are counted as crimes which a few years ago had no recognition as such." [6]

Such statistics as we have regarding crime in the European

countries [7] do not indicate any decisive change within the past few years. The figures would seem to indicate a slight decrease in France, Switzerland, Austria, and Denmark, and a slight increase in Belgium, the Netherlands, Germany, and Italy. Australia shows a marked decrease in the number of convictions for serious crime throughout the twenty-five year period from 1881 to 1906. In England, where the methods of detection and identification of criminals, as well as the whole system of criminal court procedure, are probably the most advanced in the world, and where the most reliable data is collected, the figures show a very substantial decline in the criminality of the country. Careful records have been kept of all the proved crime in the country, both minor and grave, for the thirty years between 1880 and 1910. A slight decrease is shown in the number of minor crimes, and a very conspicuous decrease in the more serious ones, indicated by a fall in the daily average convict population in a proportion of ten to three during this thirty years. During the same period the population of the country increased about ten million.[8]

Change in the forms of crime. — When one reads accounts of conditions that prevailed throughout the eighteenth century, one begins to realize what a change has taken place, at least in the form of crimes. Lecky, in his "England in the Eighteenth Century," says [9] that "the impunity with which outrages were committed in the ill-lit and ill-guarded streets of London, during the first half of the eighteenth century, can now hardly be realized." He speaks of the many atrocities that were committed throughout this period, of the mutilation and otherwise inhuman treatment of the victims by robber gangs, of the many hold-ups and robberies, and of how highwaymen "infested the roads near London." He says that "every kind of crime was concocted with impunity, and every conspirator knew where to look for daring and unscrupulous agents." Horace

Walpole is quoted as having written in 1751, " One is forced to travel, even at noon, as if one were going to battle "; and one gang of robbers in 1753 was said to have kept all London in alarm " from the number and skill of their robberies, and the savage wounds they inflicted on their victims." Piracy and smuggling were two very common crimes of this period and were often accompanied by the most daring and ferocious outrages.

There is no question but that there has been a great decrease in the number of these more serious, coarser, and more brutal crimes. Certain classes of crime, such as those characteristic of a superstitious age, offenses against the prevailing religion, and the many phases of lèse-majesté, have largely disappeared from our present category of crimes.[10] In place of these, there are many new classes of crimes — crimes characteristic of our changing civilization. As society advances, and as it becomes conscious of itself, new standards are demanded of the individuals. Actions formerly accepted without protest are now prohibited. There are always some individuals who are antagonistic to advancing social standards, and when their actions are recognized as harmful to society, these actions are added to the list of crimes.[11]

The developing of modern commercialism has been accompanied by a great increase in the number of crimes based on violation of trust and confidence, and the inordinate desire for rapid gains. It is in the more subtle, more refined ways, that the criminal tendencies of men to-day show themselves. Instead of the former type of criminal, we have " the man who picks pockets with a railway rebate, murders with an adulterant instead of a bludgeon, burglarizes with a 'rake off' instead of a jimmy, cheats with a company prospectus instead of a deck of cards, or scuttles his town instead of his ship." [12] Instead of the vulgar bandit or assassin, we have " the slaying of the quack, the adulterator,

and the purveyor of polluted water." Instead of the child beater, we have "the exploiter of infant toil, or the concocter of a soothing sirup for the drugging of babies." Instead of the red-handed slayer, we have "the venal mine inspector, the seller of infected milk, the maintainer of a fire-trap theater." [13] Ross says that "the villain most in need of curbing to-day is the respectable, trusted personage who is able from his office-chair to pick a thousand pockets, pollute a thousand minds, or imperil a thousand lives." [14] These newer and more subtle forms of crime may be just as serious as, and may even affect a far greater number of people than, the older and seemingly more barbarous crimes of the last century.

When one considers the great changes that have taken place in the kinds of crime, one realizes how difficult, almost impossible, it is to determine with any degree of definiteness whether or not crime as a whole is increasing or decreasing. The more important thing for us is to recognize these changes that have come about, and that the new type of criminal must be dealt with by society just as summarily as was the old.

Causes. — *Individual.* — Among the more important factors leading to the individual's predisposition toward crime may be mentioned heredity, education and training, habits, and occupation. Although to-day we do not accept the theory of a distinct criminal type, nor the theory of the transmission of acquired characteristics, we do recognize that *heredity* plays an important part in determining criminal tendencies. It is not that the criminal inherits a predisposition toward crime, but that he inherits certain physical and mental weaknesses which often determine these criminal tendencies. The criminal is often of an underdeveloped type, one who bears very evident signs of physical, mental, and moral degeneration. Studies of such degenerate types of families as the Jukes and the Kallikaks show

an unusual number of criminals. Recent tests of those sentenced to our reformatories and industrial schools have shown a considerable proportion to be below the average mentality. The mentally weak and deficient have less power to conform to social standards, and are more prone to yield to the many temptations about them.

While education does not prevent crime, and some of our very worst criminals are very highly educated, still there is no question but that *education and training* prove strongly deterrent factors. The study of the criminals in any of our penal institutions shows a very large proportion who have had not even a common school education. Dr. Rock Sleyster, Prison Physician of the Wisconsin State Prison, made a careful investigation of 269 murderers who had been sentenced to that institution. Of this total number of men, he found that about a third had never been to school, a half had reached the fourth grade, and but 3 per cent had finished high school.[15] Of all the prisoners in the Michigan State Prison at Jackson, nine tenths had failed to complete even a common school course.[16] The discipline of the schoolroom, the training in self-control, and the forming of habits of application and industry strengthen the individual for his place in the social and industrial world. Through religious and moral training are developed higher ideals, and the stability of character required to live up to these ideals. Industrial education prepares a man for a place in the field of industry, and thus opens up for him an honest vocation. The individual with little or no preparation for the making of a living, who has not been disciplined in self-control, and lacks the strengthening influences of moral and religious training, will far more frequently be found among the criminal classes than the one whom education and training have fitted to take his normal place in society.

An individual normally strong may become so weakened through *habits* as to yield readily to criminal impulses.

Any habit which tends to weaken the will power or to deaden the moral sensibilities is a cause of crime. Habits of idleness undoubtedly lead many to follow a life of crime rather than one of honest effort. Through habits of intemperance — the use of narcotics, drugs, and alcoholic drinks — the will power is weakened, the conscience dulled, and this leads to crime. That the prisoners themselves realize this relation between intemperance and crime is shown by the recent petition drafted by them, in the Eastern Penitentiary in Pennsylvania. In this petition they charge that 70 per cent of the crime in the state is due to the excessive use of intoxicating liquors, and ask for the enactment of a state-wide prohibition law.[17]

Although *occupation* is a minor factor, it has its influence in that certain occupations offer temptations of a particular kind. Certain occupations also are wont to be carried on under conditions and amid surroundings which would tend to weaken the moral fiber of any individual. Seasonable occupations, with their periods of work followed by periods of idleness, are conducive to dissipation and crime. The lack of any occupation is a far greater cause of crime than any particular occupation in itself. Of the 269 murderers above referred to, it was found that 90 per cent had begun work before fifteen years of age, and that more than one half of them, although averaging thirty-five years of age, had never learned a trade or become skilled in any line of work.[15]

Social causes. — Although it is the individual who commits the crime, we are coming more and more to realize that social and economic conditions have great influence upon the individual. The *environment* of any individual, particularly through his period of growth and development, largely determines his line of conduct. Of the influences in his environment, that of the home has undoubtedly the greatest bearing on the individual's future life and conduct.

It is here that we have the beginnings of educational, moral, and religious influences. The lack of these socializing influences of the home greatly increases the number of delinquent children. It has been shown that a very large proportion of those in our reformatory institutions have been denied healthful home surroundings. When we consider the number of children who are brought up in our large cities, deprived of home life, and surrounded by all manner of vicious and immoral influences, the wonder is that more of them do not become criminals. The only playground for many children is the street, and the only places of amusement for the young people are the music halls, dance halls, saloons, gambling houses, and cheap theaters, all of which tend to increase the amount of vice and crime. The lurid accounts of crime in the dime novel, its exploitation in the daily press often in a most detailed and sensational manner, and its portrayal in the moving picture show, create an unhealthful atmosphere, and, through the power of suggestion, tend to arouse the criminal instincts in the individual. While a person naturally strong may rise above his environment, a person lacking in strength and will power is influenced by his surroundings, and, where these are adverse, easily falls into criminal ways.

When *economic conditions* are favorable, when there is plenty of work to be had and at good wages, there is apt to be less crime than in periods of economic depression. When industry is slack, wages are lower, and many people are thrown out of employment. At such times there is an increase in want and misery, which is apt to be followed by many petty thefts and robberies, and not infrequently by an increasing number of crimes of violence. Idleness, with its accompanying discontent, is always conducive to crime.

A *lack of law enforcement* is another important factor. Many of our large cities have had veritable epidemics of lawless acts, due to a weak administration and an inefficient

police force. Thefts, burglaries, and even daylight hold-ups, become a frequent occurrence, and these are invariably accompanied by crimes of a still more serious nature. Not infrequently we have seen such conditions remedied almost immediately on the selection of an efficient, vigorous mayor, determined on law enforcement.

There is also serious need to-day for reform in our *criminal court procedure.* One cause of lynching, and of other instances in which people take the law into their own hands, is the lack of confidence in our criminal court procedure. So many cases have arisen where the trial has been long drawn out, where the offender has escaped punishment through some technicality in the law, or where some very wealthy offender, through technicalities and appeals, has been able to defy the law and defeat the ends of justice, that there has resulted a weakening in the regard for the law and for the courts. Where there are many difficulties and delays in the meting out of justice, there will naturally be more crime than when we have just laws, strictly enforced, and a general understanding among all classes that any violation of law will be speedily and summarily dealt with. One of the causes of the decreasing amount of crime in England is the reform in the criminal court procedure. In probably no other country is the offender pursued more relentlessly, or is justice meted out with more swiftness and certainty.

The general moral standards of any community have great influence in determining the amount of crime in that community. Where there is a *weak public sentiment,* and where the whole moral tone of a community is low, when the people look with complacency upon vice and crime, there is bound to be an increase of both. On the other hand, when the moral standards are high, and when there is a strong vigorous sentiment demanding law enforcement, many of the corrupting influences of the community will be eliminated, and the amount of crime reduced to a minimum.

The wretched *conditions in many of our jails*, prisons, and reformatories, with their lack of classification of criminals, have been the cause of many first offenders becoming hardened criminals, and have thus indirectly contributed to the amount of crime.

Changing attitude toward crime and criminals. — Society, in dealing with crime and criminals, has passed through four fairly well-defined stages:[18] retribution, repression, reformation, and prevention. These stages have not been mutually exclusive, but as society has advanced increasing emphasis has been laid upon the successive principles; until now, with the most advanced peoples, while not losing sight of the other three principles, the greatest importance is attached to the prevention of crime.

Among the earlier people, the idea of *retribution* very largely prevailed. The idea of an eye for an eye, a tooth for a tooth, was found in their criminal codes, and our attitude toward the criminal is not yet free from the natural instinct of retaliation.

It was a great step in advance when the idea of retribution was gradually supplemented by the idea of *repression*. Then punishment was looked upon rather as a means of deterring individuals from committing crimes in the future than as retaliation for some act already committed. It was in accordance with this principle that some of the most cruel and unusual forms of intimidation and torture were devised, such as drawing, breaking on a wheel, mutilation, branding, flogging, burning at the stake, crucifixion, and many other terrible punishments, some of which continued down to the past century. According to this principle it was held that persons would be restrained from committing crime in proportion to the severity of the punishments that were inflicted. After centuries of experience, people began to realize the truth of the adage that crime thrives upon severe penalties. At no time in the history of England was crime

more rampant than when even the most minor offenses were dealt with in the harshest manner. At the beginning of the last century, some two hundred offenses, many of them very slight, were punishable by death; yet crime never flourished more vigorously than during this period. "Social protection is secured not by severity but by certainty of punishment."

The next forward step was taken when *reformation* of the criminal began to be considered. It was not until the eighteenth century that there was any general development of the reformatory idea. The name that stands out pre-eminently in the history of prison reform is that of John Howard.[19] He was born near London in 1726, and died of the plague in Russia in 1790, having devoted the greater part of his life to the bettering of prison conditions. It was he more than any one else who acquainted the people with the terrible conditions in the prisons in England and on the continent, called the attention of the public to the ineffectiveness of the modes of punishment prevailing, and appealed for a more just and humane treatment of the prisoner. It was in this way that he laid the foundation for many of the modern reformatory methods in the treatment of criminals. It is only within the past few decades that the reformatory idea has gained much headway in the United States. The Elmira Reformatory was opened in 1876, and since then a number of reformatories have been established in the various states, each one looking not so much to the punishment of the individual as to his reformation.

To-day we would go a step farther. While we believe in doing everything possible for the reform of criminals, we believe that it is far more important to prevent the individual from becoming a criminal; that is, emphasis now is being strongly placed on the *prevention* of crime. Some of the many causes of crime have been mentioned: first, those

working more directly through the individual; and, second, certain social influences and conditions which cause crime indirectly through their reaction upon the individual. When the many and varied causes are considered, it is evident that we cannot rely upon any one remedy to eliminate crime.

It is equally evident that much may be done toward lessening or removing many of these predisposing influences. Through the segregation of the unfit, many of the weaker criminal elements in our population may be eliminated. Through the higher development of our educational system, a better enforcement of our compulsory school attendance laws, the extension of industrial training, and through more effective religious and moral training, a smaller number will be left weak and unprepared for life. Everything which betters the conditions surrounding the life of the individual will tend to make him better and stronger, and thus less prone to commit acts of lawlessness and dishonesty. The wiping out of the slums, the improving of tenement house conditions, the establishing of parks and playgrounds, and the bettering of conditions of labor, will lessen the influences which make for crime. All forms of vice and intemperance, with their weakening influence upon the individual, are prolific causes of crime; and consequently every movement which tends toward their elimination will have its influence in preventing crime. Likewise every effort put forward to lessen the amount of poverty and unemployment, to better economic conditions, and to wipe out corruption in business and politics, will have its influence toward this end. The improving of our penal system and the general acceptance of the reformatory idea will return many first offenders to society as useful citizens, rather than as hardened criminals. Finally, in order that we may reduce the amount of crime to a minimum, there must be a strong, vigorous, moral and religious sentiment, standing

firmly for uprightness and justice, and one which will not tolerate degrading and demoralizing influences.

Certain features of the modern treatment of criminals. — *Classification of prisoners.* — A few years ago no attempt was made at the classification of criminals. The young and the old, the first offender and the professional criminal, were herded together and all accorded like treatment. It is evident that such varying types of criminals should be accorded treatment adapted to their particular needs. Consequently anything like adequate treatment must depend upon a careful classification and segregation of these different classes. Great advance has been made in this direction by the establishing in some states of reform schools for young offenders, industrial reformatories for the adult first offenders, inebriate farms for the victims of drugs and liquors, workhouses for vagrants, hospital prisons for the criminal insane, state penitentiaries for the older or the more hardened criminals, and special institutions for women criminals.

Graded system. — Among the best features in prison management to-day is the merit system, or the grading of prisoners. According to this grade system, a man on entering is placed in the second grade, and he is advanced or degraded according to his conduct. The first-grade men, as a reward for their better behavior, enjoy certain privileges in regard to food, clothing, receiving visitors, writing letters, and so forth, which are not granted to those in the lower grades. The introduction of this system has been a great aid in discipline in that it has furnished incentives for good behavior to every prisoner.

Parole. — The parole system, now adopted by many of the states, is an indication of the new attitude of society toward the convict. After a prisoner has served a part of his term, and has given indications of being trustworthy, he is permitted to leave the prison on parole, remaining under the surveillance of the prison authorities. If at any time

he fails to report to the parole officer, or should he at any time again fall into criminal ways, he is returned to the prison for further punishment. An indication of the success of this system is found in the fact that of some five hundred federal prisoners paroled, not more than 3 or 4 per cent violated the terms of their parole.[20] This system furnishes a great incentive for good conduct in prison, and enables the convict to get started much earlier than was formerly possible at some work whereby he can earn his own or his family's living. Several of the states and the Federal government have recently extended the parole law, making it apply to life-termers after they have served a given number of years.

Indeterminate sentence.[21] — The principle of the indeterminate sentence is now applied to nearly all sentences to reformatories, and has been extended recently by several states to prisoners sentenced to the state prison. This is done on the principle that in institutions which are meant to make the erring individual more fit to take his place in society, the officials who have the care of the individual throughout this reforming process are best able to judge when the time has come that he is prepared to take up again his duties in the outside world. The judge, in sentencing him, cannot tell just how long this process will take for each individual; but those who have worked with him, and for him, at the reformatory, are much more competent to prescribe the termination of his sentence. This system results in a very great improvement in the conduct of the men and boys in the institutions, because they know that only good behavior will bring about their release, and that the time of this release will be determined by these very men who are their instructors and officials. The problem of reformatory or prison management becomes simplified, and the number of punishments is materially lessened.

Cumulative sentence. — The principle of the indeterminate

sentence should be supplemented by that of the cumulative sentence. That is, the incorrigible, hardened criminal, who shows no inclination to conform to the laws of society, should be sentenced for increasing lengths of time for successive offenses; and if after two, three, or four terms he still shows himself incorrigible, he should be permanently cared for within an institution.

Probation. — Certain judges, strongly imbued with the idea of making men worthy of a place in society, are more and more using the system of probation. That is, for the first offense or a slight crime, a man is not sentenced to prison, but is put on probation for a certain period under the supervision of a probation officer to whom he must make satisfactory reports from time to time. He is thus not cut off from the possibility of self-support during good behavior. The extension and strengthening of this probation system will mean a material decrease in the number of people in the prisons.

Many other reforms have taken place in the methods of dealing with criminals. Instead of crushing out what manhood there is left in the offender, the aim now is to preserve and strengthen it. To this end, many prisons have abolished the locked step, the clipped hair, and the convict stripes. Modern prisons, with due regard for light and air, are being erected to take the place of the unhealthful, ill-lighted, ill-ventilated, disease-infected prisons of the past. The prison hospitals are becoming modernized, and are using the best of medical science for the care and cure of the convict patients. In the prisons, schools are being established where elementary and high-school subjects are taught, and vocational and trade instruction is given. Books and magazines are circulated among the men, and in many places a prison paper is edited and printed by the prisoners themselves. In fact, it has been, and is being, recognized that to develop and bring out the manhood in a prisoner, he must be treated as a man.

Prison labor.[22] — The question of the employment of convicts has caused much discussion within the past few years, especially from the standpoint of the competition of convict labor with free labor. It is now recognized by all that the convict must be regularly employed at some useful work. Idleness is demoralizing to any individual. It not only undermines the prisoner's health and increases the tendency to insanity, but it also weakens his whole moral nature, and adds greatly to the problems of discipline. In both New York and Illinois, when a large number of prisoners were thrown out of employment by restrictive legislation against convict labor, there was a notable increase in sickness and in the number of infractions of the rules, and the enforced idleness proved demoralizing generally. The young prisoner, in particular, needs to have his hands busied and his mind occupied. He needs above all to form habits of industry and application which will stand him in good stead on his return to society.

From the standpoint of society, there is no reason why one who has committed an offense against society should be taken from the ranks of producers and be supported by what others have produced. His labor should be utilized to the fullest extent consistent with the principles of reformation, both for his own sake and for the sake of society. His labor has a value, and the burden of taxation for his support is decreased in so far as this labor is utilized. Furthermore, many of the prisoners have dependent families, and some of the states have now made provision that a portion of the prisoner's earnings shall go to those dependent upon him.

The extent of the competition of prison-made goods with those of outside labor has undoubtedly been greatly exaggerated, the total product of all penal institutions being less than one two-hundredth of the value of the products of all the manufacturing industries of the country. (In 1905 this was one two-hundred-thirtieth).[23]

When several prisons employ a large number of convicts in a particular industry, the competition with outside free labor in the same industry may be considerable. It is well, therefore, that the prisoners should be employed at such labor as will interfere just as little as possible with free labor.

In the early days, when it first began to be recognized that prisoners should be employed at some kind of labor, they were frequently employed at such unprofitable tasks as running a treadmill, twisting and untwisting ropes, or turning a crank.[24] This system has long since been discontinued throughout this country.

Lease system. — Under this system, the convicts are leased outright to contractors, who assume full responsibility for feeding, clothing, and housing them, as well as the responsibility for guarding and disciplining them. Naturally the contractor is not interested in the reform of the prisoners, his sole aim being to expend as little as possible upon their care, and to get as much as possible from their labor. Leased convicts were herded together, often in chain gangs, under conditions of virtual slavery. Such a system, although highly profitable to the state and to the contractor, is most degrading and demoralizing to the prisoner. Fortunately it has been given up in all except two of the Southern states.

Contract system. — This varies from the lease system in that, under this plan, the state keeps full control of the prisoner both as to care and discipline, merely selling his labor at a certain amount per prisoner to the contractor who supplies such machinery as is needed and whatever raw material is used. This is a simple way of disposing of his labor. Its disadvantages are: the bringing in of outside parties who are more concerned over the profits than they are over the welfare of the prisoner; one or two industries only are ordinarily pursued, and they are not such as would fit him for any trade after his release; contracts being mainly centered in a few industries, labor competition is much keener, and labor

unions have strongly resented this form of prison labor. The contract system, along with the lease system, is gradually dying out.

The piece-price system. — This is simply a modification of the contract system. Its principal advantage over the contract system is that the contractor has nothing to do with the convicts. He merely supplies the materials for manufacture, and pays a fixed amount per piece for the completed work.

The public account system. — Under this system the state has full control of the prisoners, full management of the industry, and receives all the profits. The principal disadvantages are that it requires the investment of a large amount of capital in machinery and raw materials; it is extremely difficult to find a man who is a skilled penologist and at the same time a practical manufacturer; and competition with outside industry, which comes through throwing these products on the open market, is quite as serious as in any of the other systems.

The state-use system. — This is a modification of the public account system. It seeks to prevent direct competition between prison-made goods and those made by free labor, by manufacturing only such goods as may be used in the several state institutions. In this way, the goods are not thrown on the open market, and so do not enter so directly into competition with goods made outside the prison. Several states have successfully used this system in the manufacture of certain trust-made articles, and have thus materially lowered the price of these commodities. The disadvantages of the system are that it requires such a vast amount of capital to make such a variety of products as would be needed in the various institutions, and that it is not probable that any state could advantageously use products requiring the labor of all its prisoners.

The public works system.[25] — At the present time the tend-

ency is very decidedly away from these older systems of prison labor, and toward the employment of prisoners in such ways as will interfere to the least possible extent with outside labor. Among the newer forms of labor are the employment on public works, on road work, on farms, and in forestry. Such employment has been greatly facilitated through the introduction of the honor system.[26] This has spread rapidly, until now a number of the states permit gangs of from five to fifty men to work outside the walls, often at quite a distance from the prison, under a convict foreman, and with no armed guards. In some states the work on several of the new prisons, as well as on other public buildings, has been largely done by convicts. Recently at the time of the floods in April, a large number of the Mississippi convicts worked on the levees. Road-making by convicts is now being tried in a number of states with apparently most satisfactory results. The work being out of doors, is healthful; little trouble is experienced in discipline; the labor competes to the slightest degree with free labor; and this is proving a most effective way of getting good roads throughout the country.

Arkansas has recently purchased a prison farm of some eight thousand acres on which it proposes to employ its convicts, giving up its contract and lease systems. North Carolina has a similar farm of seven thousand acres. Illinois has just made provision for employing three hundred of its convicts on a farm. A number of the other states are acquiring more land on which they are planning to use their convicts. A large proportion of the food supply is raised on these farms, and they afford a most desirable occupation for the prisoners. In New York a force of convicts was employed in clearing up a large area of forest land and in replanting large areas. The work is said not only to have proved useful for the men, but also to have demonstrated the possibility of profitably employing large numbers of convicts in the conservation of

our forest regions. These newer methods afford employment for the convict under conditions most favorable for his physical and moral development, and, employed in these ways, his labor comes into the least possible competition with outside labor.

The juvenile offender.[27] — Most fundamental of all the problems with which the courts are called upon to deal, is the problem of the juvenile offender. Boy and girl delinquents, if left to themselves, fall naturally into the careers which open to them through petty first offenses. Until recently, if they were convicted for these offenses and sentenced to prisons and reformatories, they were cast into cells with adult prisoners of the worst type. Thus, on their release, they returned to their old haunts, hardened and schooled in crime by their experiences in these institutions, a much greater menace to society than before their conviction. The agency which is gradually bringing about reform in the treatment of the juvenile offender in this country, is the Juvenile Court.

This *Juvenile Court* is distinctly an American institution, and was first started in Chicago in 1899. There presides over it a judge who gives his whole time and attention to the administration of justice to the children who are brought before him for the violation of one or another of the laws. In the children's court, the administration of justice does not mean merely the doling out of punishments. It means that the judge uses the methods that seem best suited to the helping of each boy and girl who comes before him. First, with the aid of his assistants, he finds out all that he can about the child's previous life; what kind of a father and mother he has; whether they quarrel, or drink, or are cruel to the children; whether they are very poor, or incompetent; who have been the boy's associates; what the immediate circumstances which led to the arrest were; and many more details which may be essential to the solution of the problem in hand. The con-

fidence of the child is sought, and his version of the event is gained if possible. Then, with as deep an insight as he can get into the details of the case, the judge acts.

His aim is to prescribe something for each particular child which will help to make him a responsible unit of society. In other words, it is the reformation, not the punishment, of the child that the judge seeks. To accomplish this, varying methods are used. If the home is fairly well fitted to rear the child, and the parents are anxious to do their part, the boy or girl is usually sent home on probation for a certain length of time. Probation officers follow up and keep track of all such cases. The probation officer is one of the most important factors in this whole system, for it is on his tact, insight, and ability that the success, to the child, of this period of probation rests. If a probation officer does his duty, he becomes not only a representative of the law which enforces good behavior on the young delinquent, but also the personal friend of the child, and in this lies his greatest influence. When home surroundings and influences are not what they should be, the judge prescribes for the child a certain length of time to be spent in a home, a training school, or a reformatory. Under the supervision of the juvenile courts, these homes are raising their standards, and they, in turn, are directing their efforts toward the education of the child, and his training in some line of work, both of which may better fit him for good citizenship.

One other phase of the work of these courts must be mentioned, and that is their fundamental work in the prevention of crime. In their investigations, Juvenile Court officers often unearth causal conditions which are lamentable in the present stage of our civilization. Where the Juvenile Court is strong, it is one of the biggest factors in bringing such conditions before the public, and in securing constructive social legislation. Juvenile delinquency is so often the result of environment that the number of cases

in court is said to serve as a reliable barometer of social conditions in the surrounding territory.

QUESTIONS

1. Define crime. Explain your definition. Distinguish between crime and vice.
2. How may crimes be classified?
3. What data have we regarding the extent of crime?
4. What is said regarding the increase or decrease of crime?
5. What important changes have taken place in the forms of crime?
6. What are the principal individual causes of crime? Tell about each.
7. What are the principal social causes of crime? Tell about each.
8. What four stages are discernible in society's attitude toward crime and criminals? Describe each.
9. Tell about the classification of prisoners.
10. Discuss the graded system. The parole system. The indeterminate sentence. The cumulative sentence. Probation.
11. What are some of the other general reforms in the treatment of criminals?
12. Discuss the various systems of prison labor: the lease system; the contract system; the piece-price system; the public account system; the state-use system; the public works system.
13. What is said about the juvenile offender?
14. Give an account of the juvenile court.

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CHAPTER XII

MARRIAGE AND DIVORCE

I. The family, the fundamental unit of society.
   1. Economic.
   2. Religious.
   3. Educational.
   4. Social.
   5. Biological.

II. The origin of the family.

III. Types of family.
   1. Polyandrous.
   2. Polygynous.
   3. Monogamous.

IV. The change in relation between husband and wife.

V. Marriage conditions in the United States.
   1. Marriage rate.
   2. Marriage age.
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VI. Divorce in the United States.
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X. Conclusion.

The family, the fundamental unit in society. — The family is by far the most important social institution of to-day. It is the fundamental unit of society, as well as the unit at the basis of all social development. The family was the first *economic* unit, that is, the economic life of all peoples first centered about the household. Within the family was found the first division of labor, — the first coöperation between individuals. The female members of the family cared for the younger members, preparing the food supply, and tending to the household wants; while the male members were busied with the chase, securing food through hunting and fishing, or with the defense of the family against the attacks of enemies. As we pass from the primitive to the more advanced economic stages, we find the family unit playing a still more important part in the life of the people. In the early life of our own people, the household was the economic unit, the center of economic activities. The home was built, the forest cleared, the ground tilled, the flocks and herds cared for, the clothing made, and the food provided, all within the family, and through the closest coöperation of its individual members.

The family has been also the center of the *religious*, educational, and social influences. In early biblical times all religious activities gathered about the patriarchal family. Graham Taylor says that the family is the "birthplace of religion" and that "it is difficult, if not impossible, to conceive of religion apart from the family." He speaks of the Holy Family as the "great seal of Christianity," and says that "it is less difficult to think of reconstituting the human race, and the relations which make the race human, if it had

to begin over again, without the Church rather than without the home. Indeed, religion could be more readily reproduced from the family, if the Church were lost, than it could be maintained by the Church if the family were lost." [1]

It is through the family that *educational* influences are first brought to bear upon the child. His education is begun within the home. The use of language, the medium of expression and the foundation for other learning, is gained there. The home is the center of cultural influences, and determines in a large measure the extent and direction of the child's education.

It is within the family that the greatest influences are brought to bear upon the child, — influences which prepare him for his place in *society*. Here the child learns self-restraint, and learns that his will must sometimes be made to conform to the will of others. In finding his place in the family, he unconsciously becomes the better fitted to take his place in the larger social units.

From a *biological* standpoint, the family is the primary unit of the social organism. The reproduction of life, and thus the perpetuation of the race, comes through the family, and it is within the family that, through the prolongation of infancy and the care of the weaker and the more helpless, there has been developed that feeling of sympathy or altruism which has played so important a part in our social growth.

The origin of the family. — Although marriage, as we know it, is a distinctly human institution, nearly all of the higher forms of animal life have very distinct family relationships. Among nearly all kinds of birds we find the male and female helping each other in the building of the nest and in caring for the young, and such birds, when once paired, remain so until the death of one or the other of them.[2] Among many of the higher forms of mammals, family life is fairly well developed, the male remaining with and assisting the female in the care of the young. This is particularly true

among the various forms of manlike apes. As we pass from the highest forms of animal life to the savage races of men, we find the family as a universal institution. Westermarck says that "the tie that kept together husband and wife, parents and children, was, if not the only, at least the principal social factor in the earliest life of man," and that "in all probability there has been no stage of human development where marriage has not existed." [3]

Types of family. — Although the family has existed from earliest times, different forms have prevailed at different times and among various peoples. The principal types have been the polyandrous, polygynous, and the monogamous.

The *polyandrous*, in which we have the one wife with several husbands, is "a relatively rare form of marriage and the family, found only in certain isolated regions of the world" and under conditions where it is "conceivably difficult for one man to support and protect the family." [4]

The *polygynous*, in which we have the one husband with several wives, has been found much more frequently from early times down to the present, and among various peoples. The capture of women in war and holding them as slaves, or wives, was an important phase of the growth of polygyny.[5] This type of family life is inconsistent with the more advanced civilization, because of the subordinate position of woman in the household, and in that it does not afford an opportunity for the highest development of the child.

The *monogamous* family,[6] in which we have the one husband and the one wife, is found among all the more advanced peoples of the world, and is the type which more nearly conforms with our highest ethical and social ideals. This type is more in accord with biological conditions, in that the numbers of the two sexes are approximately equal. Children are much better cared for, because in this type of family we have husband and wife united in the care and in the train-

ing of the children. The family relationships are thus much stronger; the higher types of affection and emotion are developed, as well as the higher types of religion and morals. Because of the strengthening of these ties, we find the children in such families having a greater care for their parents in their old age. Thus we find that while the family is found in all stages of civilization, there has been a gradual evolution of the monogamous family until that is the characteristic type of all the most civilized peoples. It is the type most consistent with biological laws, and the type within which are developed those cultural and social attributes which best fit the individual to take his place in society.

Change in relation between husband and wife. — Along with the evolution of this higher form of family life, there has taken place a marked change in woman's relative position in the family. Among many of the early peoples, the position of the wife was practically that of a slave. The man was considered as having a property right in a wife, and thus had complete control over her. He could drive her away from his home if he felt so inclined, and could even kill her if she displeased him. As civilization advanced, woman's position was gradually improved. Man could no longer repudiate her except for the most serious offenses, and eventually certain rights were conceded to the woman. Gradually she came to a position of equality, and the position of woman in the home can be taken as a fair criterion of the advance of any nation to-day.

Marriage conditions in the United States. — Early in the eighties, the increasing number of divorces in this country led a number of the most prominent citizens to petition Congress to make provision for the collection of statistics on marriage and divorce. This resulted in the first exhaustive study of this question in the United States that had ever been made, and covered the twenty-year period from 1867 to 1886. At the end of the next twenty-year period, in 1906,

a similar study was made. The importance of gathering data on this subject was first recognized by the Federal Census Bureau in 1890, and each census since that time has collected data on marital conditions throughout the country.

Of the information thus collected, that pertaining to marriage is more gratifying to those interested in the social welfare of our country, than that pertaining to divorce. Perhaps the most gratifying items of information collected, as indicating wholesome marriage conditions, were in regard to the marriage rate and the marriage age.

Marriage rate. — It was shown that, contrary to the current opinion, the marriage rate has tended to increase slightly, rather than to decrease; that is, the proportion of single men and women has been gradually decreasing, and the proportion of married gradually increasing. A little more than two fifths of our total population, or nearly three fifths of the population fifteen years of age and over, are married. This proportion is higher than in most of the European countries.[7]

Marriage age. — It was also shown that there was not the tendency to defer marriage that many had supposed to be characteristic of these later years. On the contrary, the census for each successive decade since 1890 has shown a slightly increasing proportion of those married within the earlier age groups.[7] While it is undoubtedly true that, because of the higher standards of living, there is an increasing tendency among the professional classes to marry at later ages, yet throughout the country as a whole, and also in each particular section, there is shown to be a tendency among all the people toward an increasing proportion of marriages, as well as toward marriage at an earlier age.

Effect of economic conditions on marriage. — The marriage rate of any country has been shown to be very directly affected by war, and also by economic conditions. At the time of our Civil War, the marriage rate fell off materially, owing

to the large number of young men who were in the army, and to the unsettled condition of business at that time. Also, statistics collected in our own, as well as in other countries, have shown that there is always a very close relation between economic conditions and the number of marriages. During periods of hard times, when the costs of provisions are high and it is difficult to make a living, there is a lessening in the number of marriages. When conditions become more favorable, when the outlook for economic prosperity is brighter, more are willing to assume the responsibility of marriage.[8]

Marriage laws. — The marriage ceremony has varied greatly among different peoples, and from time to time. The Roman Catholic Church looks upon marriage as one of the sacraments. Although the Protestant churches have not accepted the sacramental idea of marriage, they have looked upon it as one of the most deeply religious of all their ceremonies. In several of the European states, the parties are permitted to choose between civil and religious marriage. More of the states, however, make the civil marriage obligatory, but the parties are permitted to have a religious ceremony also, if they so desire. Because of the great social significance of marriage, the different states in our country felt justified in attempting to regulate it through legislation. This matter having been left to the states, we have about as many different marriage codes as there are states in the Union. All of the states require some form of license, or certificate, secured through the proper public officials, and require that the ceremony be solemnized either by a minister of religion, or by a magistrate authorized by law to perform the ceremony. A number of the states have laws forbidding the marriage of the insane, epileptic, and feeble-minded; defining the degree of relationship within which marriage is forbidden, some forbidding the marriage of first cousins; and specifying the age at which a valid marriage can be con-

tracted, and the age below which parental consent is required. In most states this age is twenty-one years for the man and eighteen for the woman. Several Southern states prohibit the marriage of white persons with negroes, and certain Western states prohibit the marriage of whites with Indians or Chinese. The great diversity in state legislation has given rise to endless confusion in the marriage laws, and has led to an insistent demand for uniform marriage laws throughout the country.

Proposed reforms. — One of the greatest needs recognized to-day is for *uniform marriage laws* in all the states. Some states have been notably lax, not only in the laws regarding marriage, but also in their enforcement of these laws. This laxity has often led to people going to other states than their own to have the ceremony performed, when they would not have been permitted to marry within their own state.

The *registration* of marriages is another recognized need throughout the country. On so vital a social question as this, it is desirable that we should have the most complete and accurate data possible, yet at the time of the last special report on marriage and divorce only about one half of the states had made provision for the state registration of marriages. In a large number of these, the registration was reported as more or less unsatisfactory, several of them making no attempt to enforce the provision.[9] The items collected are not identical in the different states, and are often compiled so carelessly as to be of little value. This is a question on which full and accurate information is most essential as a basis for social action, and the means are at hand whereby such information could be collected at comparatively little cost. At the time the license is secured, information could and should be recorded regarding the age, parentage, birthplace, nationality, race, and occupation of the contracting parties, and regarding any previous divorce of either of the parties.[10]

The *laxity* of the marriage laws is undoubtedly a factor in

the increasing number of divorces. Where it is a simple matter to secure a license and to find some one to perform the ceremony, many are apt to rush into marriage without giving due consideration to the consequences. This is shown by the fact that practically one eighth of all separations leading to divorce come within a period of less than one year after marriage.[11] The ignorant, as well as the heedless and thoughtless, should be restrained through strict requirements in the securing of the license, the requiring of a previous given term of residence within the district in which the license is secured, and the provision that a given period of time must elapse after the securing of a license before the ceremony can be performed.[12] Such laws are justifiable because marriage is a matter of public concern as well as of private welfare.

Eugenic marriage laws have been passed within the past few years by thirty of the forty-eight states.[13] These laws are the direct result of the awakening of popular interest in the subjects of heredity and race preservation. Recent studies, such as those of the Jukes and the Kallikak families, have shown the enormous cost to society of a race of degenerates. The increasing numbers of feeble-minded and insane persons have emphasized the need of social restriction on hereditary influences. The terrible cost to society of the transmission of social diseases has led several states to pass laws requiring a physician's certificate that the contracting parties were free from such taints before a marriage license would be granted. It is hoped that such laws will not only lessen the number of those tainted with feeble-mindedness and disease, but that they will also arouse society to more persistent efforts for the eradication of transmissible diseases. The importance of heredity in the improvement of plant and animal life has long been recognized by society. Now that we are beginning to have a clear understanding of social conditions and social forces, it is hoped that through

wise legislation we may at least lessen the serious social consequences of uncontrolled hereditary influences.

Divorce in the United States. — *Extent.* — When we come to consider the facts regarding divorce, the statistics give us greater cause for apprehension. We are confronted with the fact that divorce is increasing in the United States three times as fast as the population, and that approximately one out of every twelve marriages ends in divorce.[14] The menace of such a condition as this to the most important of all social institutions, the family, can hardly be estimated. Within the twenty-year period, 1900 to 1920, nearly two million divorces were granted. In 50 per cent of these cases, children were reported. This means not only the breaking up of nearly two million homes, but also the lack of home influences for the vast number of children involved.

Party to whom granted. — About two thirds of the total number of divorces were granted to the wives, and in less than one tenth of the total number of cases was any alimony allowed. The fact that the number of divorces obtained by wives was twice as great as the number obtained by husbands does not help in locating the responsibility for marital unhappiness. Although no distinction between the parties is made by law in respect to the grounds on which a divorce may be secured, two or three of the more common charges, such as neglect to provide, drunkenness, and cruelty, are more frequently brought against the husband than against the wife, thus giving the wife a legal ground for divorce more frequently than the husband.[15]

Duration of married life. — In more than a fourth of all the marriages ending in divorce separation took place within two years from the time of marriage. More than one half of the total number of separations have taken place by the end of the fifth year.[11]

Remarriage. — It is commonly supposed that a large number of divorces are secured for the purpose of marrying again,

but the data available do not bear out this conclusion. No definite information was secured on this subject by the Federal Census, but in several of the New England states where careful records were kept, it was shown that only one third of the divorced persons married again. This number included those who were married many years after their divorce, and consequently gives no indication of the number securing divorces for the purpose of remarriage.[16]

Migration and divorce. — It has been shown that about one divorced couple out of every five have moved to some other state from that in which the marriage took place. This does not prove, however, that they moved to some other state for the purpose of securing the divorce, as the general movement from state to state was at almost exactly this same ratio.[17] Because of the notoriety attached to a few of those socially prominent who formerly went to some such place as Sioux Falls or Reno for the purpose of securing a divorce, the extent of migration for such purposes has been overestimated in the popular mind.[18]

Distribution. — A marked difference in regard to the prevalence of divorce was found to exist between the several geographic divisions of the United States. The rate for the North Central division was more than two and a half times, and that of the Western division more than four times, that for the North Atlantic states.[19] This indicates a rapidly increasing divorce rate as one goes westward. This increase has been explained by the fact that in the West we have a newer section of the country, and easier divorce laws. Such sections always include a greater proportion of the energetic and self-reliant, and also of the discontented and lawless elements of the population, such elements as would be more apt to resist any form of restraint. Study has also shown the divorce rate to be greater in the larger cities than in the rural districts. Careful records kept in Minneapolis, Minnesota, since 1910, show that for the past several years there has been

one divorce for every eight marriages in that city. Many cities have shown an even higher proportion than this.

Comparison with other countries.[20] — The United States has a higher divorce rate than any foreign country except Japan. It is about three times that of France, five times that of Germany, ten times that of Norway and Sweden, and about thirty times that of Great Britain and Ireland.

Legal grounds for divorce. — *Statistics often misleading.* — Although we have very definite statistics regarding the causes for which divorces have been granted, these statistics by no means give us an accurate picture of the real causes of separation. Other causes than the real are often given in the petition for divorce. This may be for the reason that the cause given will result in less humiliation to the parties concerned, or that it may be more easily proved; or the cause given may be accepted as a legal ground, whereas the real cause may not be so accepted in that particular state. Again, there may be indirect causes, more real than the alleged causes, as in the case of a wife leaving her husband because of cruelty or drunkenness. In such a case the husband might secure a divorce on the grounds of desertion. This, then, would be the listed cause, but not the real cause.[21]

Variations with the different states. — The matter of divorce being left to the several states, we have as many different codes of divorce laws as there are states. South Carolina grants no divorces; New York recognizes but one legal ground for divorce, that of adultery; while a number of the states list some twelve or fourteen possible causes for absolute divorce. Some states have exceedingly lenient laws, making it a very simple and easy process to secure a divorce. In certain places desertion for one year, cruelty, neglect to provide, abandonment, ungovernable temper, and physical incapacity, are considered legal grounds.[22]

In the Federal "Report on Marriage and Divorce," some forty-seven causes are given, although a very large propor-

tion of the divorces (94 per cent) are granted for the five principal causes, desertion, cruelty, adultery, drunkenness, and neglect to provide, and for combinations of these causes. By far the greatest of all the single causes for divorce is desertion, about two fifths of all those granted being for this alone. This does not give us any indication of the cause of desertion. More than three fourths of all divorces are granted for the three main causes, desertion, cruelty, and adultery. Although drunkenness is given as a direct cause in comparatively few cases, intemperance is given as the direct or indirect cause in about 20 per cent of the cases; that is, "intemperance was present in about one divorce case out of every five."[23]

Causes of the increase of divorce. — The cause of the greatly increasing number of divorces within the past few decades may be found in the great economic and social changes which have taken place. Changes in the form of industry have revolutionized conditions within the home. The position of woman in the industrial life has undergone the greatest change within this period, and growing out of this has come a change in her social and political life. As she has become more free, she has revolted against conditions to which she formerly helplessly and hopelessly submitted. Thus we see that the increasing number of divorces is not necessarily due to an increasing immorality, but may be due to changing economic and social conditions, and the adjustments growing out of these.

Economic interdependence of husband and wife lessened. — Under the earlier form of industry, where the economic life centered within the household, the husband and wife each had a particular part of the household duties to perform. They, assisted often by the children, performed all the duties that made for the satisfaction of their wants, and the home was a well rounded out economic factor in itself. With the introduction of the factory system, many industries were

taken from the home to the factory. As manufacturing, trade, and commerce developed, an increasingly large proportion of men carried on their work outside of the home. Later, those industries which were the wife's particular province, the preparation of food and clothing, were largely absorbed by the factory; and the introduction of machinery, with its subsequent division of labor, opened up new fields for the employment of women. In this way the coöperation and the mutual dependence of one party upon the other has been lessened. This mutual dependence is found to-day upon the farm to a much greater degree than in other places. These changes in the form of industry have made it possible for either the man or the woman to get along alone with fewer inconveniences. Indications of this are the increasing number of bachelor apartments that are going up in our cities, and the extension of club life. With the increasing number of occupations opening up to her, woman has likewise become less dependent upon a home. In these ways have the industrial ties which tended to hold man and wife together become loosened. While formerly they were restrained from applying for a divorce because of this industrial dependence of the one upon the other, now that this has lessened, the restraint has become less effective.

The changing status of woman. — As woman has become more independent economically, she has also become more independent intellectually and legally. Throughout the last century, a marked change has taken place in woman's position. From a position of subjection, she has gradually advanced, at least in the more enlightened countries, to a position of comparative equality with man. The woman of a few years ago would submit to many things which the woman of to-day would not think of bearing. It is only within the last few years that our schools, colleges, and universities have been generally open to women. To-day, 50 per cent more girls than boys are graduating from the high

schools.[24] This not only tends to make woman more independent, but also more self-assertive, and more efficient in demanding her rights. With this has come a change in her legal status. From being looked upon as little more than property, she is now recognized as having rights before the law, in a few states equal to man's. As she has become more independent and more efficient, and as she has been granted rights before the law, it is but natural that she should call upon the courts to free her from conditions that have become unbearable.

Lack of preparation for home duties. — Under former conditions, the boy worked about the home assisting the father in his many activities, and in this way served his period of apprenticeship. Through these associations he became fitted to take his place in a home of his own. With the change that has come in family life, and the change in modes and conditions of work, the boy has been deprived of much of this companionship with his father, and of many of these home influences which were so important in preparing him efficiently to cope with the problems and duties of a home.

The daughter in assisting about the household in the earlier days, learned to weave, to knit, to sew, to cook, and to care for the younger children. These years of training in the home of her mother most admirably fitted her for her future place in a home of her own. The new economic and social conditions have more seriously interfered with the preparation for marriage of the young women than of the young men. In the crowded city homes, opportunities are lacking for any practical preparation of the girl for her home duties, even if she be not one of the army of factory girls. In the so-called higher class homes, a distorted idea of society or of higher education, and an unduly exaggerated idea of the relative place these interests ought to take in the life of a girl, have led to a subordination of those activities which would

better prepare her for her place in the home. Thus it is that the inefficiency of the wife as a housekeeper, and this lack of preparation for home duties on the part of both the man and the woman, have led to much dissension which has terminated in legal separation.

Higher standards of life. — Recent years have seen an enormous increase in the production of wealth. Along with this increase have come growing inequalities in the possession of this wealth. Many have been educated to higher standards of living only to find themselves without the means for satisfying these higher demands. There has been a striving for wealth and position beyond the possibilities of attainment, and this constant striving after something which is beyond reach, on the part of either or both of the parties, often leads to discontent and estrangement. This higher cost of living undoubtedly causes many among the more highly educated and professional classes to defer marriage. The young people see many comforts and luxuries all about them, and rather than be deprived of these, they await an established income before marrying. At this later age their individuality has become more pronounced, their modes of thought and action have become crystallized, and it is more difficult for each to become adapted to the habits and peculiarities of the other. Moreover, there are apt to be fewer children in these late marriages. This is an important item, inasmuch as children are one of the strongest factors in preventing separation and divorce.

The weakening of tradition. — These past few decades have seen a remarkable development of individual liberty in the political, the industrial, and even in the religious life of the people. Along with this growth of individualism, there has come a reaction against the customs and traditions of the past. In this realization of greater freedom, many have gone to extremes, in that they have resisted all forms of restraint. This is a perfectly natural tendency, and has been

an accompaniment of every great movement toward freedom throughout history. Along with this growing sense of freedom, this increasing antagonism toward any form of restraint, has come a weakening of the influence of religion and of public opinion in preserving family traditions. There has been a gradual weakening of the religious conceptions of marriage, without a corresponding strengthening of the social and legal aspects.

There has also taken place a breaking down of the restraint of public opinion. In our present high-tensioned life, with its rapid changes, and particularly in our crowded cities where one family knows and cares little about its next-door neighbor, even though they be in the same tenement or apartment house, the individual does not feel that restraint of public opinion which has always been not only a strong factor in controlling his everyday actions, but which has also deterred many from seeking separation through the divorce courts.

Formerly, when marriage was entered upon, it was entered upon for life. There was no thought of any breaking of the vows other than by death. To-day we rarely pick up a paper that does not have accounts of divorce proceedings, and we are constantly confronted with such facts as this, that "one marriage out of every twelve ends in divorce." Such facts as these supplanting the traditional view of marriage, cannot but have great influence upon the individual. With these possibilities of divorce constantly before him, the individual will be much more careless in entering into marriage, and the pettiest family grievances are wont to turn his thoughts toward the divorce courts.

Proposed remedies. — *Legal reforms.* — Naturally any attempt to remedy the divorce evil should begin by improving the marriage laws. We realize the importance of this when we consider that more than a fourth of all separations take place within the first two years of wedded life.

There is quite as great need for uniform divorce laws as

for uniform marriage laws. These may come either through constitutional amendment, or through the coöperation of the different states for securing uniform legislation.

An offense serious enough to give legal grounds for divorce, is a serious offense against society, and should be dealt with under the regular forms of criminal legal procedure.

No divorce should be granted without the state being represented in the proceedings. Marriage is a legal contract, the breaking of which seriously affects society, and society should protect itself by being thus represented.

Fewer grounds for divorce should be recognized by the courts. Such elastic grounds as "incompatibility" and "ungovernable temper" are unworthy of the serious consideration of any court.

The establishing of a Court of Domestic Relations,[25] or of a Divorce Proctor, in some of our leading cities, has resulted in bringing about many reconciliations after divorces have been applied for. Often difficulties are adjusted through the agent of the court, or the court proctor, before reaching the stage of applying for a divorce. A court like this comes into confidential relations with disaffected couples, is able to get at the real causes of domestic troubles, and can bring about a happy settlement in a large number of cases. Such courts should be established wherever divorces are granted. Through them, the haste and mere routine forms which now characterize the proceedings of many of our divorce courts would be avoided.

Training for home-making. — There must be the closest coöperation between the church and the school, and between each of these and the home, in the training of the child for his place in society. Through both moral and religious teachings the sanctity and purity of family life must be upheld, and the right ideals of marriage and home life taught.

Greater attention must be given to the actual training of the child for the duties of the home. No girl should leave

school without having had training in such of the domestic arts as will equip her for her duties as a home-maker.

Social legislation. — Intemperance has been shown to be a factor in one fifth of the divorces granted. Of the cases brought before the Court of Domestic Relations in Chicago recently, forty-six out of every one hundred were due to excessive drinking.[25] It is evident that any measures which will promote temperance, will also mitigate the divorce evil.

Other social legislation, such as that directed against the social evil, that aiming to improve conditions surrounding the home, — in fact, such legislation as will tend to eliminate the evils in our social life, and develop strong wholesome influences, will lessen the occasions for divorce.

Conclusion. — It has been estimated that if the rate of divorce continues to increase as rapidly as it has the past few decades, by 1950 one fourth, and by 1990 one half, of all marriages in the United States will be terminated by divorce. The rapid increase has led many to predict that the trend of social evolution would continue along the lines of more free divorces. Some have even advocated trial marriages and free love, maintaining that this was the direction in which we were moving, and holding that to stand for such indicated that they were in advance of their time.

Every great stage in social evolution has had its ill-balanced enthusiasts who have contended that their own extremist views indicated the direction of social progress. Such movements as the Peasants' Rebellion, the Reformation, and the Revolution, as well as the present period of readjustment, all have had their extremists. However, the contentions of these extremists have not been representative of the great movements of social development. The general course of progress has been along definite channels, and has been in the direction of greater democracy, the higher position of woman, and more permanent family relations. In the present transitional period, as women are becoming more inde-

pendent, and as appeal to the courts is becoming more common to all classes, may it not be that this increasing number of divorces indicates one of these movements off on a tangent rather than the real direction of social progress?

As we look back over the past, it is evident that the whole trend of social evolution has been away from the easily broken marriage tie toward the strictly monogamous marriage. The permanent marriage bond between the one husband and the one wife has been characteristic of all our most advanced civilizations. This permanency of the marriage bond is not only in accord with social evolution, but is also in accord with our highest social, ethical, and religious ideals. More than a fourth of the children in our many reform schools and homes for dependent children come from homes in which there has been desertion or divorce.[26] Any loosening of the marriage bond could only lead to the neglect of childhood, and to general social demoralization. "The welfare of the child, as well as the moral character of adults, is bound up with the stability of the family."[27] More free divorce cannot but lead to promiscuous marriage. This is contrary to the whole teaching and spirit of Christianity, one of the most fundamental ideas of which is the purity of the family. As Graham Taylor has said, "Nothing human is so identified with all that is divine as is the family."[28]

QUESTIONS

1. In what several ways may the family be said to be the fundamental unit in society?
2. What is said regarding the origin of the family?
3. What are the principal types of the family? Give main characteristics of each.
4. What change has been gradually taking place in the relations between husband and wife?
5. What is said about the marriage rate in the United States? The marriage age?
6. What effects have economic conditions upon marriage?

7. What is said of the marriage laws of the United States?
8. What are some of the more important proposed reforms? Discuss each.
9. What is the extent of the divorce evil in the United States?
10. Are the greater number of divorces granted to husband or wife? How is this explained?
11. What is said regarding the duration of married life? Remarriage? Migration and divorce?
12. How does the number of divorces granted differ in different parts of the country? How does the divorce rate of this country compare with that of some of the other countries?
13. What are the principal legal grounds for divorce?
14. What are the principal causes for the increase in the number of divorces?
15. Show the relation between the economic interdependence of husband and wife and divorce.
16. How has the changing status of woman affected the divorce rate?
17. What is said of the lack of preparation for home duties and divorce?
18. How may higher standards of life influence the divorce rate?
19. What is said about the weakening of tradition and divorce?
20. Mention some of the more important proposed legal reforms.
21. What other proposed remedies are mentioned? Tell about each.
22. Summarize the conclusion to the chapter.

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CHAPTER XIII

THE LIQUOR PROBLEM

I. Survey of the liquor traffic.
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Survey of the liquor traffic. — *Early phases of the problem.* — The use of the various forms of brewed and fermented liquors dates back almost to the beginning of civilization.

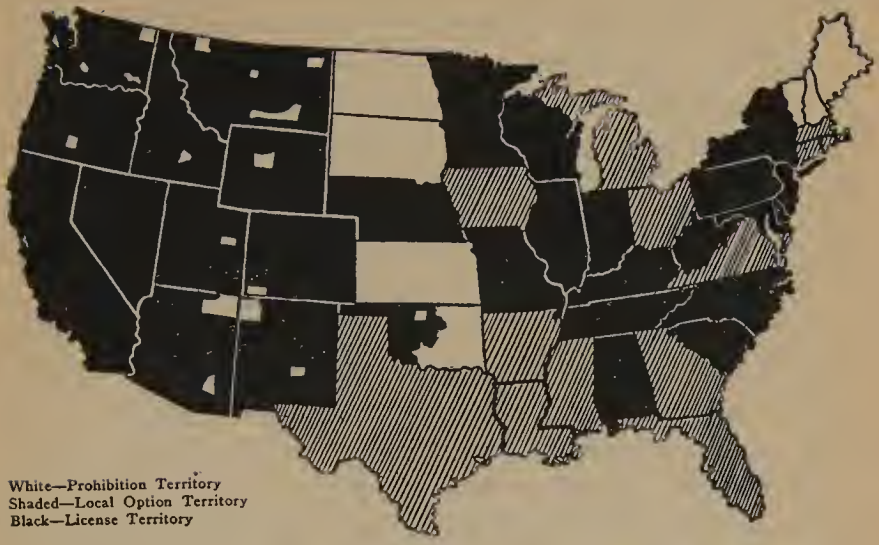
When people first began to raise fruits and grains, they began to make drinks, and the earliest history of all peoples shows their familiarity with alcoholic beverages. The writings of the early Hebrews, Egyptians, Chinese, and of the sages of India, as well as the sagas of the Norsemen, not only refer to the use of liquors, but also make frequent references to the drunkenness of the people. The early histories of the Saxons, the Danes, and the Britons make frequent mention of the use of intoxicants. Most nations to-day have some more or less characteristic national drink. The Russians have their vodka, a distilled liquor commonly made from rye; the Japanese their sake, a kind of beer made by the fermentation of rice; the Mexicans their pulque, a fermented drink made from the juice of the agave; and the Tartar tribes have their kumiss, a fermented liquor made from milk. The Teutons have their beers, and the Latin races their wines. All of these drinks are alcoholic, and are to a greater or less degree intoxicating.

Liquor in the colonies.— Among the early American colonists, drinking was much more universal than at the present time. Strong drink was used in the home, and on all special occasions. It was very much in evidence at the barn raisings, at the logrolling contests, and husking bees, and was furnished to the harvest hands in the fields. These customs were not opposed by the church, nor was it considered out of place for the clergy to drink with the people. Although drinking was so universal during this period, the amount consumed per capita was very much less than it is to-day, as drinking in those days was not a regular and systematic habit as it is now, but took place rather on occasions.[1] Liquor was taken as a matter of course, and it was not generally considered any disgrace to become intoxicated.

Movements against intemperance. — The first movement against intemperance began about eighteen hundred, when several abstinence pledges were circulated. The first tem-

perance society was founded in 1808 in New York; and a few years later, one was founded in Massachusetts. During the first quarter century, the movement was directed primarily against the use of distilled liquors, the pledge having reference to these alone, as cider, beer, and wine were still considered harmless and indispensable. The next quarter century, however, was characterized by the establishment of many temperance societies, most of them based on a total abstinence pledge. By 1833, it is estimated that there were six thousand local societies, having over a million members.[2] By the middle of the century, these movements against intemperance had gained sufficient strength to secure the passage of legislation against the liquor traffic. In 1845, a law was passed in New York prohibiting the public sale of alcoholic liquor. This law was referred to the people and received a large majority vote, but was repealed in 1847.

The first permanent prohibition law was passed in Maine in 1851. The next quarter century was characterized by renewed agitation, the forming of strong national temperance associations, and by prohibition legislation in a number of states. In the first decade of this quarter century, from 1850 tc 1860, fourteen of the different states passed prohibition laws. All of these laws, however, except for the state of Maine, have since been repealed, declared unconstitutional, or annulled by a license tax law. It was in this quarter century that the Order of Good Templars was formed (1851), the Prohibition Party was organized (1869), and the W. C. T. U. (1874) commenced its great work against the liquor traffic. During this period, a number of religious denominations organized temperance societies within their own ranks. The Catholic Total Abstinence Union was formed in Baltimore; The Congregational Total Abstinence Association started in 1874; and similar associations were formed among the Methodists and Baptists and other denominations about this same time.



"WET" AND "DRY" MAP OF THE UNITED STATES, JANUARY 1, 1893.

"WET" AND "DRY" MAP OF THE UNITED STATES, JANUARY 1, 1916.

Courtesy of The American Issue Publishing Company.

The period including the last quarter of the nineteenth and the first few years of this century was characterized by the repeal in several states of the early prohibition laws, by the founding of the Anti-Saloon League (1893), and by the remarkable extension of local option, by the industrial demands for temperance, and by the great increase of "dry" territory. By 1916 more than one third of the states had state-wide prohibition. About three fourths of the total area of the United States was "dry" territory, and a little more than one half of the total population of the United States was living in "dry" territory.[3]

Change in character of later movements. — The earlier temperance movement was directed rather against the drink habit than against the drink traffic. It was rather a personal appeal to the individual, and from the standpoint of the individual. It sought to reform the drunkard, and to prevent others from becoming addicted to the liquor habit. The recent movement, while not losing sight of the individual, approached the question more from a social point of view. It recognized the evils of the drink habit, but directed its energies primarily against the drink traffic as the most effective means of reaching the habit. It is only within recent years that we have begun to make a careful study of our social problems. As we have attempted to analyze such problems as those of crime, of divorce, of insanity, of feeble-mindedness, poverty, unemployment, and disease, we have begun to realize the part intemperance has played in all these problems. The emphasis to-day is being placed on the "removal of the causes." We are approaching problems like these in a more scientific way than formerly. As our social order becomes more complex, we become more dependent upon one another, and we begin to realize that what affects one, affects the many. It is not merely the question of one individual being intemperate, but if that individual through his excesses adds to the burdens of poverty

or of crime, which we have to pay for, his excesses concern us all. Personal liberty is most desirable, but when that liberty encroaches upon others, when others have to pay for the abuse of that liberty, there is justice in restraint.

The liquor problem is being considered from a broader point of view than ever before. The criminologist is studying the problem from the standpoint of its relation to crime. The economist is studying it from the standpoint of its effect upon the efficiency of the worker. The captains of industry, the heads of our great railroads, and other industrial organizations, are studying the problem from the standpoint of the individual efficiency of the employees. The biologist studies it for its effect on heredity, and its relation to feeble-mindedness and insanity. The social worker studies it from the standpoint of its relation to poverty and to the dependent classes, and particularly of its intimate relation with vice. The taxpayer is beginning to appreciate the enormous cost of the results of the liquor traffic. It is because of the study of the problem in these various aspects, and of the fact that the people had become aroused to the far-reaching influences of the liquor traffic, that the movement looking toward the elimination of the traffic gained such remarkable headway during these past few years.

Present status of the problem. — *Amount of liquor consumed.*[4] — The total amount of liquor consumed in the United States in 1914 reached the enormous amount of twenty-two and one half gallons for every man, woman, and child in the country. If we do not count the women, nor those under twenty years of age, this means an average consumption, for every man twenty years of age and over, of approximately eighty gallons a year. The total amount consumed was about two and a quarter billion gallons (2,252,272,765 gallons). Perhaps these numbers will be more readily comprehended if we consider that this amount would fill to overflowing a ditch four feet wide and four and

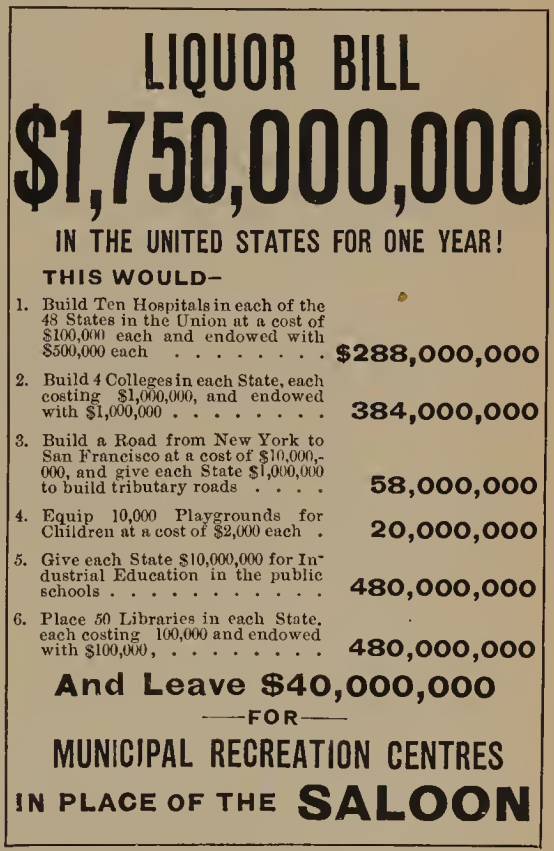
one half feet deep, extending across the United States from the Atlantic to the Pacific; or it would fill a six-inch pipe extending eleven and a half times around the earth.

Of this total amount consumed, one and one half gallons per capita was of distilled spirits, including rum, gin, whisky, and alcohol. About half a gallon was wine, and the remaining twenty and a half gallons was of malt liquors, mostly beer. The amount consumed in 1914 was about twenty million gallons more than had been consumed the preceding year. The per capita consumption has decreased since that time. In 1913 it had reached 16 gallons per capita; in 1919, 9 gallons, and in 1920, 3 gallons. The amounts of distilled spirits and of wines, although varying from year to year, have averaged almost the same for a considerable period of years. Distilled spirits contain about 45 per cent alcohol, wines 10 per cent, and malt liquors 4 per cent.[5]

The United States was thus the greatest beer-consuming country in the world, and second only to Russia in the consumption of distilled spirits. In the per capita consumption of beer, the United States ranked fifth, being exceeded by Belgium, the United Kingdom, Germany, and Denmark in the order named. In the per capita consumption of distilled spirits, the United States held sixth place, being exceeded by Denmark, Germany, Hungary, Netherlands, Austria, and France.[6]

The annual drink bill of the United States. — This was estimated at from one and a half to two billion dollars, and was probably somewhere between these two extremes, or about $1,750,000,000.[7] On this basis, this means an annual tax of about eighteen dollars for every man, woman, and child in the country; or, for every family, this would mean an average expenditure of about ninety dollars a year. When we consider the large number of families where no liquor is consumed, it will be seen that in those families which use liquors the average would be considerably higher than this. The

amount of our annual drink bill was more than three and a half times the total expenditure for our public schools, more than twice the total amount of gold and silver in circulation, and nearly double the total interest-bearing debt of the United States. As compared with the total value of some of our manufactured goods, the liquor bill was equal to about three times the value of the cotton products, and was equal to more than three times the total value of wool products. This value is practically equivalent to the total value of all the imports brought into our country during the year 1914.[8] It is only by comparing our annual drink bill with such items as these, that we can arrive at any comprehension of the enormous amount that we were spending annually for liquor.


LIQUOR BILL
$1,750,000,000
IN THE UNITED STATES FOR ONE YEAR!
THIS WOULD–
1. Build Ten Hospitals in each of the 48 States in the Union at a cost of $100,000 each and endowed with $500,000 each $288,000,000
2. Build 4 Colleges in each State, each costing $1,000,000, and endowed with $1,000,000 384,000,000
3. Build a Road from New York to San Francisco at a cost of $10,000,000, and give each State $1,000,000 to build tributary roads 58,000,000
4. Equip 10,000 Playgrounds for Children at a cost of $2,000 each . 20,000,000
5. Give each State $10,000,000 for Industrial Education in the public schools 480,000,000
6. Place 50 Libraries in each State, each costing 100,000 and endowed with $100,000, ... 480,000,000
And Leave $40,000,000
—FOR—
MUNICIPAL RECREATION CENTRES
IN PLACE OF THE SALOON

POSTER ISSUED BY THE SOUTH END ALCOHOL EDUCATION COMMITTEE OF THE BOSTON ASSOCIATED CHARITIES.
— From *The Survey*, June 27, 1914, p. 351.

Government revenues from liquor. — The government receives each year a considerable amount in the way of customs and license fees from the liquor traffic. The total amount received in 1914 in custom revenues from malt liquors, wine,

and distilled spirits, license duties and internal revenue, was approximately $250,000,000.[9] The liquor license fees in this country, exclusive of the Federal tax, amounted to approximately $80,000,000.[10] This means that our government, Federal and local, was receiving annually from the liquor traffic $330,000,000, or a little less than one fifth of the total amount expended for liquor. Or, for every five dollars expended by the people in the purchase of liquor, one dollar was returned to the government in the form of licenses, customs, and revenues.

Some economic phases of prohibition. — Much has been said about the probable effect upon industry of the prohibition of the liquor traffic. Without doubt a great many were kept from voting against the traffic because of the fear that thereby a large number might be thrown out of employment; but there were only about sixty-three thousand wage-earners in the liquor industry of the United States.[11] This means that less than one out of every one hundred of the total number engaged in manufactures was engaged in the making of liquor; or, less than one out of six hundred of the total number of wage-earners of the country. Another line of argument was that if we were to close the brewing business, it would take away our market for such of the farm products as were used in the brewing industry. According to the "Text Book of True Temperance" issued by the United States Brewers' Association, there was an annual consumption of about ninety-five million dollars' worth of American farm products by the brewers. When we compare this with the value of the total farm products, however, we find that it is a little less than one per cent of the total value of those products. In this connection we must keep in mind the very large per capita expenditure for liquors, the under-consumption of food by a large number of our working families, and the fact that if this industry were destroyed, a considerable proportion of that now expended for liquor would undoubt-

edly be expended for farm products. This increased demand for farm products would probably far more than make up for the lessened demand through the cutting off of the annual consumption in the brewing industries. Another fear often expressed by those engaged in transportation, was that if we were to eliminate the liquor traffic, it would seriously cut into the receipts of the railways. However, on comparing the freight traffic in wines, liquors, and beers, with the total freight traffic, we find that they made up only about four tenths of one per cent of the total traffic.[12]

A further comparison of the liquor industry with some of the other leading industries shows that for each million dollars invested, the liquor business employed only about one fifth as many workers as the average number employed in the five leading industries, the textile, iron and steel, lumber, leather, and paper and printing industries.[13] Based on these figures, Charles Stelzle estimates that if the amount expended for liquor were to be spent for bread and clothing, "it would give employment to eight times as many workers who would collectively receive five and a half times as much wages."

Another class to be thrown out of their employment by prohibitory laws were the saloon keepers and bartenders. According to the last census there were sixty-eight thousand of the former, and one hundred thousand of the latter. This meant one saloon keeper or bartender out of every two hundred and twenty-five of those engaged in gainful occupation.[14] There is no reason why this proportion cannot be readily absorbed in other industries. Furthermore, Stelzle has pointed out that if the amount expended for liquor should be expended for bread and clothing, this would give employment to a larger number of people, as it requires many more people to sell a million dollars' worth of bread and clothing than it does to sell liquor of the same value. When we consider the number thrown out of employment as the result of prohibition, it is well to keep in mind that

many more than this were thrown out of employment each year, as the result of arrests for drunkenness, and through being incapacitated for their regular tasks because of dissipation.

Effects of intemperance. — Although we can see the effects of intemperance all about us, it is impossible to make any exact estimate of the relation between intemperance and crime, poverty, insanity, or other social conditions. It is an extremely delicate matter to give figures in dealing with so complex a problem as that of the relation of the liquor traffic to social conditions. Many estimates are made by those studying these problems, and in these, we find the greatest variations according to whether or not the person is a friend or a foe to the liquor traffic. It is impossible to make definite estimates in our analysis of causes because of the complexity and interrelation of these causes.

Poverty. — Take for instance such a problem as that of poverty. We have varying estimates as to the causes of poverty. All are agreed that intemperance is one of the principal causes, and most reports give a definite figure to this effect; but these figures do not give any indication of the importance of intemperance as a contributory cause. Of those causes mentioned by Dr. Devine, unemployment is given first, but no indication is given of the part that intemperance played in this unemployment — of how many were thrown out of work because of intemperate habits, or of how many were unfitted for work through alcoholic excesses. The second cause mentioned is overcrowding. Intemperance, again, may have been an important factor in reducing families to this condition. Physical disability is given as the cause of a large amount of poverty, but here again we have no way of knowing the part intemperance played in this, in lowering the vitality of the individual, or in causing accidents which have unfitted him for work. The same may be said in regard to such other causes as

desertion, immorality, unreliability, and mental defects. These are all given as direct causes of poverty, but it is more than likely that intemperance was a considerable factor in each one of them.

It was not necessary for us to find out the precise number of deaths from smallpox before taking measures to wipe out the disease. The important thing was to realize its menace, and the possibility of its elimination. It is the same way with the liquor traffic; even though we have not the exact figures, we have the evidence all about us that it is a serious problem from every social viewpoint, and we know that it can be eliminated when we become aroused to action.

During the last few years, since society has begun to recognize the relation of intemperance to so many of the social problems, a number of investigations have been made in regard to the influences of the liquor traffic. Probably the most exhaustive study of the problem that has ever been made was that undertaken a few years ago by the "Committee of Fifty." This committee was made up of fifty men, each of national prominence in his own particular field of work. As a result of their investigations, they arrived at the conclusion that about 25 per cent of the poverty which comes under the view of the charity organization societies, and about 37 per cent of the poverty found in almshouses, can be traced directly or indirectly to liquor.[15] A still larger per cent of the destitution of children was found to be due to the liquor habits of parents or guardians. Dr. Devine, who has probably had as extended first-hand dealings with the poor as any man in the United States, arrives at practically this same estimate. He says that "it is a conservative estimate that one fourth of all cases of destitution with which private agencies have to deal are fairly attributable to intemperance."[16]

Crime. — Careful investigations in regard to the relations between intemperance and crime indicate that intemperance

is directly or indirectly a cause of about 50 per cent of the crimes committed. The "Committee of Fifty" made a careful investigation of some thirteen thousand convicts in seventeen prisons and reformatories in the United States. Their conclusion was that intemperance was one of the causes of crime in 50 per cent, and the first cause in 31 per cent, of the cases.[17] This investigation did not include ordinary jails, and so did not take account of persons convicted for misdemeanors, including drunkenness, or violation of the liquor laws. Two other very extensive investigations have been made by the Massachusetts Bureau of Statistics. The first, under the direction of Carroll D. Wright, made a study of all of the sentences for crime in the state for the previous twenty years, or over five hundred thousand cases, and showed that 60 per cent of all cases were for distinctively liquor offenses.[18] A more detailed study was made of all the crimes of a single county (Suffolk) for one year, the total number of sentences within this one year being nearly seventeen thousand. This study showed that "84 per cent of all crime was due directly or indirectly to the influence of liquor."[19] A similar investigation was carried on later in Massachusetts under the direction of the legislature. This included a careful study of all the convictions (26,672) within the state for a period of one year, and the conclusions arrived at were almost identical with those arrived at in the earlier investigation. That is, in about 84 per cent of the whole number of convictions "the intemperate habits of the offender led to a condition which induced the crime."[20]

Insanity. — As regards insanity and intemperance, we find a complex situation. There is no doubt that intemperance is a great causal factor in insanity, and there is also no doubt that certain mental defects lead to intemperance. A great many of those who are mentally deficient, who are lacking in self-control, become addicted to the liquor habit. One of the foremost authorities in England estimates that

in at least 62 per cent of the cases coming under his observation, mental defect or disease was the cause of inebriety.[21] However, it is probable that many of this 62 per cent were defective because of alcoholic excesses of the parents, or because of disease due directly or indirectly to drink. As in the other cases, although we do not have exact figures, we do have figures based on careful investigations, and sufficiently exact to give us a fairly accurate idea of conditions. The reports of the Boards of Insanity for a number of the states, and particularly the reports of the boards of Massachusetts,[22] where careful studies have been made, give alcohol as a causative factor in from 17 to 22 per cent of the cases. Perhaps as fair and unbiased an estimate as we have on this question is that made by Homer Folks. He estimated that 20 per cent of the men, and 10 per cent of the women, admitted to hospitals for the insane are afflicted with insanity "due directly and exclusively to the use of alcohol."[23] He recognizes that there are other causes of insanity to which the use of alcohol is believed to be a contributing factor.

Disease and death due to alcohol. — We have no means of knowing the exact number of deaths in the United States due to alcohol. Perhaps the best authority we have on this subject is Dr. E. B. Phelps, who, in his "Mortality of Alcohol" estimates the number of deaths annually in the United States "in which alcohol may have figured as a causative or contributory factor" at about sixty-six thousand.[24] This number is for males between the ages of twenty and seventy-four years, and does not take into consideration the part that alcohol plays in infant mortality, or in that of others under the age of twenty, or in that of women. Considering these other factors, Warner says that of all the deaths due in any way to liquor, "the popular estimate of one hundred thousand a year is in all probability conservative."[25] Although scientists are not agreed as to figures, they do agree as to the effect that alcohol has on the health

of the individual. One of the most important facts is that those who drink to excess are more liable to contract disease, and also, that the disease is apt to be of greater severity.[26] This brings us to the conclusion that intemperance not only leads to certain diseases, but it also weakens the power of resistance to disease that should be the natural possession of every individual. One of the best examples of this is that given by Dr. Osler. He shows " that in 100 cases of pneumonia, among abstainers 18.5 per cent die; among moderate drinkers, 25.4 per cent; among steady or heavy drinkers, 52.8 per cent." [27]

The influence of alcoholism on heredity is becoming better recognized with the further study of hereditary tendencies. Many experiments, made recently, show the effect of alcohol on the offspring of alcoholic parents. In practically every case, it has been found that there is a much larger proportion of defectives among the children of alcoholics. One of the most striking experiments in testing the physiological influence of alcohol was that carried on by Professor Hodge of Clark University, under the direction of the " Committee of Fifty." [28] He obtained two pairs of cocker spaniel puppies, as nearly alike as it was possible to get them. Two were given, along with their regular food, a small amount of alcohol daily, but not enough to produce at any time any evidence of intoxication. The tracing out of the results of these experiments affords a most striking lesson on the physiological effects of alcohol. A number of tests were made to determine the effect upon the strength, ability, and resistance to fatigue. These tests showed a marked decline in the activity of the pair that had been fed alcohol. They seemed to have much less energy, and their resistance to fatigue was much less. The most striking effect, however, was shown in the offspring of the two pair. Of the pair which had been given no alcohol, 90 per cent of the offspring were healthy and normal; while of the other pair, but 17 per cent were

healthy and normal. A comparison is made of the outcome of these experiments with comparative observations which had been made by Professor Demme upon alcoholic and non-alcoholic families, which shows strikingly similar results. From the ten normal families 88 per cent of the children were normal, while from the ten alcoholic families, but 17 per cent of the children were normal, the remaining 83 per cent being deformed or defective in some way.[29] Many other experiments have been made with animals, also many observations have been made regarding the influence of alcohol on offspring of alcoholics and non-alcoholics, all of which seem to indicate that while alcohol has a marked influence on the physiological conditions of the individual, it has an even more marked influence in causing degeneracy of the offspring.

Controlling action justified. — Accepting only the most conservative figures, we are justified in concluding that liquor is the cause of at least one fifth of the insanity, one fourth of the poverty, and one half of the crime in this country; that it materially increases the death rate; that it seriously affects the health and vigor of the individual; and that it is a most potent force of race degeneracy. Perhaps two of the ablest investigators who have ever attempted a scientific investigation of social conditions are Charles Booth of England, and Carroll D. Wright of the United States. Certainly no one could accuse either of these men of the bias of the temperance agitator. Booth says, "Of drink in all its combinations, adding to every trouble, undermining every effort after good, destroying the home and cursing the young lives of children, the stories tell enough. It does not stand as apparent chief cause in so many cases as sickness and old age; but if it were not for drink, sickness and old age could be better met."[30] Carroll D. Wright, following his careful study of actual conditions as they existed in Massachusetts, concludes his report with the following statement: "These figures paint a picture, at once the most faithful and hideous, of the guilt

and power of rum. Men and women, the young, the middle-aged, the old, the father and son, husband and wife, native and foreign-born, the night walker and man slayer, the thief and adulterer, — all testify to its ramified and revolting tyranny. Therefore the result of this investigation, in view of the disproportionate magnitude of the exclusively rum offenses, and considered in connection with the notorious tendency of liquor to inflame and enlarge the passions and appetites, to import chaos into the moral and physical life, to level the barriers of decency and self-respect, and to transport its victims into an abnormal and irresponsible state, destructive and degrading, calls for earnest and immediate attention at the bar of the public opinion and the public conscience of Massachusetts." [31]

Control of the traffic. — *Prohibition.* — The principal means by which the people have attempted to control the liquor traffic have been by prohibition, local option, and license. As we have seen, a number of the states passed prohibition laws only to repeal them later. Thirty-two of the states went dry by state action prior to the passage of the National Prohibition Act of 1919. In those states where there are large centers opposed to the movement, prohibition has not been an unqualified success. Such legislation has undoubtedly succeeded in preventing the making of liquors on a large scale, and in making it harder to obtain liquor. It has removed the temptation from the young, and from persons disposed to alcoholic excesses. In some states there have been counties and municipalities in complete and successful rebellion against such laws. In such places evil consequences have resulted. This engenders a disrespect for law and order, tends to increase corruption, and brings public service into contempt.[32] However, where prohibition is backed up by a strong public sentiment, and vigorously enforced, there is no question but that it can, and does, materially lessen the evils associated with the

traffic. Jan. 29, 1919, the Department of State issued a proclamation declaring that the 18th amendment to the Federal Constitution had been ratified by the requisite number of state legislatures and would become effective one year from date of the 36th state ratification, Jan. 16, 1920. Ultimately it was ratified by all but Rhode Island, Connecticut, and New Jersey. The War Time Prohibition Act was attacked, but the U. S. Supreme Court upheld its validity as a war measure, Dec. 15, 1919. The constitutionality of the amendment was similarly upheld, June, 7, 1920. It now appears to be firmly established as the law of the land.[33]

Local option. — Many have felt that a more effective way of securing prohibition was by beginning with local option; that is, by allowing small units, such as the county or the city, to determine whether or not they shall have prohibition. The argument for this means of control is that when the smaller unit votes out the saloon, this presumes a sentiment back of the vote that will insure the enforcement of the law, and does not attempt to enforce such a law in communities where the common sentiment is strongly opposed to the legislation. In such communities with a sentiment against temperance, and with the local officers in sympathy with that sentiment, it is extremely difficult to make temperance legislation effective. The advocates of local option are strongly in sympathy with temperance legislation, and even with ultimate prohibition, but believe that the better way to secure this end is through the extension of such legislation by degrees, and over such areas as maintain a public sentiment that will enforce the laws.

License. — Many have advocated high license as a means of regulating the liquor traffic. They have argued that we cannot prohibit, and therefore it is better to regulate, this traffic. This system has lessened the number of saloons in many places, and has been a source of considerable revenue to the local units of government. The danger of this system

is that in licensing the traffic we give it official recognition, if not justification and sanction. It gives a community a false sense of security. The people are apt to feel that now that the traffic is regulated, they have no further responsibility in the matter, and they are apt to be quite indifferent as to the effects of the traffic. There is probably nothing that dulls the conscience of the people of a community toward the evils of intemperance so much as the thousand or twelve hundred dollars that a saloon may pay into the coffers of a city in the form of a license. Many, otherwise in sympathy with temperance, are impressed with what the city can do with the license money, and with the degree to which it "lowers taxes." Such persons fail utterly to consider the added cost of the saloon, and the fact that although it may add to the revenues directly in the form of license money, it may cost the taxpayer many times this amount indirectly in the increased expenses of the police force, the criminal courts, and in the upkeep of the jails, almshouses, and other institutions for the products of the traffic. High license also gives a respectability to the institution through driving out the poorer saloons, and many go to the better kept places who would not go to the low-down grog shop. Although high license may have the immediate effect of bettering conditions, its ultimate effect is undoubtedly to retard the movement looking toward the elimination of the traffic.

The dispensary system.[34] — This system, sometimes called the Gothenburg or the state account system, was adopted in South Carolina in 1892. Under this plan the liquor traffic is directly in the hands of the government. The system seeks to do away with the saloon as a social gathering place. In South Carolina liquor could be sold only by a salaried employee of the government, between the hours of sunrise and sunset, and could not be drunk on the premises where sold. It was sold only for cash, and was not to be sold to drunkards or minors. There was thus a lessened temptation

to increase the sales, and, there being no music or decorations to attract the people, and treating being forbidden, there was less temptation to acquire the liquor drinking habit. This system did not prove so successful as its advocates had hoped, and to the temperance people, the idea of being a partner in the saloon business was repugnant. It was succeeded by a local option law in 1906, under which about three fourths of the state became dry territory; and this in turn gave way to state-wide prohibition in 1915.

Associations opposing the liquor traffic. — A number of associations have been formed in the last fifty years, directed against the liquor traffic. One of the first of these to become an effective agency was the *Independent Order of Good Templars,* founded in 1851, in New York. This, as a total abstinence society, has since become an international order, having lodges in all the principal countries, and having a membership of more than a half million people.[35]

The National W. C. T. U.[36] of the United States was organized in 1874, in Cleveland, Ohio. Since that time organizations have been formed in every state of the Union, and in 1883 the World's W. C. T. U. was founded by Frances E. Willard. This organization has auxiliaries in more than fifty countries, and has a membership of about half a million. It has had great influence in creating public sentiment in favor of temperance, and has been instrumental in securing temperance instruction in the public schools. It has also taken an active part in securing antigambling and anti-cigarette laws, and laws for the protection of women and girls. Perhaps its greatest influence has been the instilling of ideals of temperance in the minds of the young people of our country, thus laying the foundation for the temperance movement which is now gaining such headway.

The Prohibition Party was established in 1869 as a national political party. It first came into prominence at the election of 1884, but has never secured a large following. In the

1912 election, it polled but little more than 1 per cent of the total vote cast.[37] In some states this party has been more effective, and has elected several members to state legislatures.

The Ohio branch of the *Anti-Saloon League* was founded in 1893 at Oberlin, the National League at Washington, D.C., in 1895. Branches of this league have since been organized in all the states and territories. This association soon became probably the most aggressive and the most effective organization in the securing of temperance legislation. It was instrumental in obtaining local and county option laws for many of the states, and then worked for the national prohibition law. The league is not partisan, nor denominational, but aims to secure the coöperation of every one interested in temperance, regardless of political or church affiliation. It holds that the only solution of the problem is "no saloon," and is strongly opposed to the license system which it declares to be "vicious in principle, utterly inconsistent with the purpose of enlightened government, and in practice a protection to a traffic which is inherently criminal in its nature."[38] The three lines of activity of the league are agitation, legislation, and law enforcement. It carries on a most vigorous campaign of education, and has been instrumental in securing much of the most effective recent temperance legislation. It formerly stood for local option as the most effective means of advancing temperance, but later came out for nation-wide prohibition.

Substitutes for the saloon. — Many suggestions have been made regarding the securing of substitutes for the social function of the saloon. The establishing of clubs, of reading rooms, of athletic associations, all give opportunity for the social intercourse that is so essential in the life of the workingman. Further opportunities are offered by public parks, public baths, and outdoor gymnasiums. Substitutes for the food and drink offered in the saloon present a different

problem. Many lunch rooms and restaurants are now found conveniently located in all our cities. Temperance drinking places have been established in a number of centers. Certain of our small municipalities throughout the Middle West have recently established coffeehouses, where the workingman, as well as others, can secure a cup of coffee, tea, or a glass of milk, and a sandwich or doughnuts, for a nickel. By installing such places as these, the municipality can very materially lessen the drawing power of the saloon. Many manufacturers have recognized this fact, and have made provision for furnishing their employees good meals at low prices. This has resulted in improving the comforts and the morals of the men, and " often neighboring saloons have been driven out of business." [39]

The " Committee of Fifty " mentions two other methods of rivaling the influence of the saloon. The first is " the method of improving the outer conditions and the inner life of the home " ; the second is the " education and moral enlightenment of the individual." Any opposition to the traffic which overlooks these two influences can but fall short of accomplishing their full aim. The substitute for the saloon should be the home. Before we can have the best home life, we must have improved conditions surrounding the home. Temperance workers must coöperate with other associations in the effort to provide suitable homes for the working people, and to improve the sanitary conditions ; and they must be alert to the enforcement of the tenement house laws and such laws as aim to better the living conditions of the people. They must also coöperate in the various measures to better the economic conditions, and thus raise the standard of living of the working classes. Carroll D. Wright, whom we have previously quoted, says, " Intemperance is often set forth as the chief cause of poverty, and it undoubtedly is responsible for a very large amount of suffering and want ; yet a careful study leads one to the conclusion that intem-

perance is quite as often the result of poverty as poverty the result of intemperance." [40]

As has been pointed out in the final summary of the report of the Committee of Fifty, " Those forces that make for the development of personality are, in the last analysis, the forces that are doing the most to overcome the evils of the liquor traffic." [41] Emphasis is here placed on the moral equipment of the individual. It is here that the church and the school are exerting so great an influence in this campaign through the molding and development of character. Likewise, the municipal night schools, the public lecture courses, the university extension work, the educational work of the Y. M. C. A., the free public libraries and free reading rooms, are all factors working for the higher development of the people, which not only counteract directly the influence of the saloon, but also act indirectly by strengthening the character and the manhood of the individual.

The outlook. — We have considered the extent of the liquor traffic and its cost to the individual and to society. In relation to the individual we have seen how it destroys health, reduces mental and physical efficiency, and impairs the life of future generations. From a social standpoint, it is an important factor in crime, insanity, and feeble-mindedness; it tends to social disorder and low standards of morality, and causes pauperism and disease.

Will it be possible to eliminate a traffic which has become so deeply rooted as this? At the present time there are many encouraging signs. We have referred to the remarkable spread of " dry " territory within the past few years, until by 1915 three fourths of the area of the United States and one half of the population were under " dry " laws. The most remarkable thing about the movement at the present time, and the one which gives the greatest hope for its ultimate success, is the attitude of the business men of the country toward the traffic. They are raising the question,

"Does it pay?" The resolutions recently passed by the Pittsburgh board of trade well illustrate this newer phase of the movement. These hardheaded, practical business men referred to the increasing burden of taxation caused by the liquor traffic, to the great gain morally to the citizens of the country through its elimination, and to the economic loss through the inefficiency of the individual; and then they unqualifiedly indorsed the movement for national prohibition.[42] A number of the principal railroads, and of the large industrial corporations in the country, now demand strict temperance on the part of the employees. Even the leaders of organized baseball are demanding temperance of their players. Insurance companies are requiring higher rates from those engaged in the liquor traffic. Such associations as the Minnesota Commercial Men's Association declare in their by-laws that they will not be liable for any indemnities for injuries or death, if the accident happens while the member is in any degree under the influence of intoxicating liquors. A stand like this enables them to give a lower rate, and places them at a big advantage over associations that do not make this discrimination. These instances call attention in a most practical way to the effect of the traffic.

The menace of the liquor traffic to the efficiency of a nation was called to the attention of the people as never before by the action of the European countries in the recent great conflict. No sooner had the war broken out than the several countries made a desperate effort to bring this traffic under control. The Czar issued his prohibition ukase. France and Belgium prohibited the use of absinthe. Germany prohibited spirits in military districts and cautioned her troops against the use of alcoholic drinks. Some of England's greatest statesmen declared the liquor traffic to be their country's greatest foe. Shortly after entering the war Italy passed several measures looking toward a more complete control of the traffic. Although we cannot even yet

tell the full results of all these restrictive measures, they have served in a remarkable way to call attention to the seriousness of the problem, and to the need of social action against the destructive influence of the traffic; and in the minds of many the question has been raised as to why if the use of liquor has so serious an influence in times of war it is not equally serious in times of peace.

Booker T. Washington and other leaders, in promoting the interests of the negro race, came out very strongly for temperance as a means of safeguarding this race. Dr. Washington said that "strong drink is one of the worst evils that beset the negro." For a number of years we have recognized the menace of the traffic to the Indians, and have sought to protect them from it through legislation.

The passage of the Webb-Kenyon Law, prohibiting the shipment of liquor into dry territory from another state, greatly increased the effectiveness of temperance legislation within these states. The prohibiting of intoxicating liquor throughout the United States Navy by the recent order of the Secretary of the Navy was another indication of the recognition of the dangers of the traffic.

A number of the leading papers of this country, such as the *New York Tribune*, the *Chicago Record-Herald*, and the *Minneapolis Journal*, took a firm stand as "dry" papers, and refused their columns to liquor advertisements.

The extension of suffrage to women very materially increased the temperance vote throughout the country, and was a material influence in eliminating the saloon from many towns and villages.

The many social workers in our cities in their ministrations of aid and relief exerted every possible influence against the saloon as one of the greatest influences for evil with which they had to contend.

The various temperance associations coöperated much more fully than they had ever done before, and conse-

quently proved much more effective in the work they were doing.

The reports from the many cities which had voted "no license," showed an increase in bank deposits, a lessened number of arrests, and a marked decrease in the number in jails and workhouses, and convinced many that the absence of the saloon was a distinct economic, as well as social, advantage.

The "safety first" and "industrial efficiency" movements immediately came up against the liquor traffic as affecting both safety and efficiency, and brought home to the employers of labor the facts regarding this influence. The Employers' Liability Acts which have gained ground so rapidly likewise made employers recognize the cost to their business of intemperate employees. Many of the labor leaders have taken an emphatic stand in favor of temperance as an important aid in bettering the conditions for the workingman.

We were becoming aroused to the pernicious influence of the saloon in politics, and recognized that in self-defense we must exert every power against this influence. The doubting public then had the encouragement that came from the evidence from many sections that prohibition legislation could be made effective.

The many investigations which were made into all phases of the liquor traffic in its relation to the various social problems; the scientific research that was conducted; and the wide dissemination through the lecture platform, the press, the church, and the school, of the information secured, — all these agencies brought to the people, as never before, a realization of actual conditions. At the same time there was a growth of social consciousness and a recognition of the necessity for, and the power of social action. These are the forces which led to the eighteenth amendment and which encourages one in the belief that the liquor traffic may, in the near future, be eliminated from our social order.

QUESTIONS

1. What were some of the early phases of the liquor problem? To what extent was liquor used in the colonies?
2. Give a brief survey of the movement against intemperance.
3. What changes have taken place in the character of the later movements?
4. Give some of the principal facts in regard to the amount of liquor consumed in the United States.
5. What was our annual drink bill? Compare this with some of our other items of expenditure.
6. What revenues did the government receive from the liquor traffic?
7. What are some of the more important economic phases of this problem?
8. What is said regarding the relation between intemperance and poverty? Between intemperance and crime? Between intemperance and insanity?
9. To what extent is disease and death attributable to alcohol?
10. What influence has alcoholism on heredity?
11. What justification is there for public control of the sale of intoxicating liquor?
12. Tell about prohibition as a means of controlling the traffic. Local option as a means of controlling the traffic. License as a means of controlling the traffic. The dispensary system as a means of controlling the traffic.
13. What are some of the principal associations opposing the traffic? Tell of the work of each.
14. What suggestions have been made regarding substitutes for the saloon?
15. What are some of the encouraging signs regarding the traffic?
16. What is said of the outlook for further control or elimination of the traffic?

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CHAPTER XIV

POVERTY

I. Changing attitude toward poverty.
II. Pauperism *versus* poverty.
III. Pauperism.
IV. Extent of poverty.
V. Causes of poverty.
    1. Physical.
    2. Individual.
        a. Sickness.
        b. Accident.
        c. Intemperance.
        d. Mental incapacity.
        e. Degeneracy.
        f. Miscellaneous.
    3. Social.
        a. Low wages.
        b. Unemployment.
        c. Bad housing.
        d. Cost of war.
        e. Other phases of economic life.
VI. Remedies.
VII. Poverty *versus* wealth concentration.

Changing attitude toward poverty. — Poverty is by no means a new problem, nor is it particularly characteristic of the life of any people. It has existed from the earliest times, and is found in all countries. As far back as in scriptural times frequent reference is made to the poor and poverty stricken, while all down through the Middle Ages the mendicants or beggars were a considerable element in every community. Travelers through Egypt, Palestine, Turkey, Spain, and Italy, all have much to relate in regard to the

amount of destitution and the great number of beggars found in those lands, while recent investigations in our wealthiest countries have shown an appalling number living in dire poverty.

Within recent times a very decided change has taken place in our attitude toward poverty. It was formerly taken quite as a matter of course that a certain proportion of the population should always be living in a state of abject want, with only the barest necessities of life, and forced to resort to begging in order merely to exist. A constant admonition was to "feed the poor" and little thought or attention was given to helping them out of their condition and, least of all, to keeping others from falling into a like condition. Beggars were looked upon as just as inevitable an element of the population as were slaves, and it was no more thought that poverty could be eliminated than it was thought that slavery could, or that the great plagues which swept across the country at intervals could be stamped out.

After centuries of indifference, of accepting poverty as a natural condition, society began to study itself, and found that the poverty of many of its members had formed one of the darkest spots in its history, and was closely interwoven with many of its other ills. Then it was that society began to measure, to analyze, and to seek for the causes. After realizing the extent, and finding certain causes, the next logical step was to find a remedy, or, rather, to find remedies. Poverty is now looked upon as a disease which can and must be eradicated from the body politic. After years of effort we succeeded in doing away with slavery. Many of the great diseases which formerly took such an enormous toll in human life have been practically eliminated in the more advanced countries. So, too, it is now believed that many of the causes of poverty may be brought under social control. Carver says that "poverty is as unnecessary as malaria or yellow fever." "The coming hundred years

should see poverty practically eradicated from the American domain." [1]

Poverty *versus* pauperism. — In the first place, a careful distinction must be made between poverty and pauperism. A person may be said to be living in poverty when he is unable "to obtain those necessaries which will permit him to maintain a state of physical efficiency." A pauper is a person "who depends upon public or private charity for sustenance." [2] Poverty is thus a much broader term than pauperism. While a pauper may be spoken of as living in poverty, there are large numbers living in poverty who are not paupers. Those living in poverty include that large number who are barely able to make a living, who are constantly on the verge of distress, and who, if misfortune overtakes them, become dependent upon others for the necessities of life. They are unable to provide for themselves a sufficient amount of nourishing food, a proper amount of clothing, or comfortable or sanitary housing conditions, such as will sustain them in good health and enable them to keep up a standard of physical efficiency that will enable them to compete successfully in the effort to earn a living. Living under such conditions for any great length of time means a gradually lessened efficiency and inadequate opportunities for the children. This in turn increases the burden of poverty for the succeeding generation.

A person may live in poverty and may even know all forms of destitution and want, without falling into the ranks of the paupers. It is only when he becomes so helpless as to be compelled to fall back upon public or private relief, or so far loses his self-respect as to be willing to rely upon charity, that we call him a pauper. This term frequently carries with it "a suggestion of weakness, inferiority, and reproach." [3] Pauperism in the social world is likened to parasitism in the biological world.

Pauperism. — At the taking of the last census there were

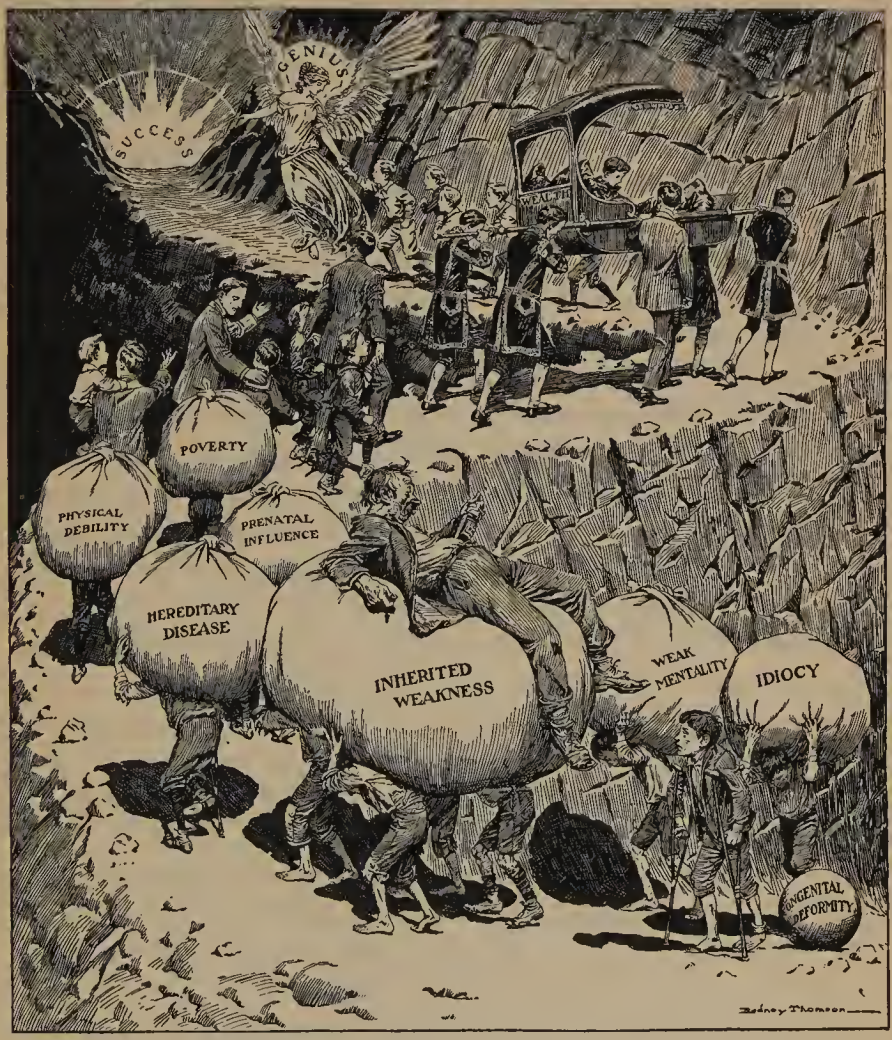
approximately eighty-four thousand paupers in almshouses in the United States.[4] This was an increase of about twenty-five hundred since the special census of 1903. These figures show that the number so cared for is very large, but give us no adequate conception as to the number of paupers in the country, or as to whether or not that number is increasing or decreasing. No attempt is made to enumerate the number of paupers not cared for in almshouses. Furthermore, some states make much more adequate provision for their paupers than others. Such states would appear to have a larger proportion than those states with less adequate provisions. The census figures show us that there were ten times as many paupers in almshouses in New England, in proportion to the population, as in the West South Central states. This proportion is probably due in a large measure to the more adequate provision for their care in the East. Although the census figures seem to indicate a slight decrease in the relative number of paupers cared for in almshouses, per hundred thousand of the population, these figures give us no assurance that the actual number of paupers is decreasing, because they include such a small proportion of the total number, and because many who were formerly cared for in almshouses, such as dependent children, the insane, feeble-minded, and others of the defective classes, are being constantly removed to be cared for in special institutions for these classes.

After a careful analysis of all the figures available in 1891, Professor Richard T. Ely arrived at the conclusion that there were more than three million paupers in the United States.[5] On a basis similar to that used by Professor Ely, Robert Hunter says that "there is every indication that not less than four million persons are now dependent upon the public for relief." [6] This estimate was based on 1901 and 1902 figures, and meant approximately 5 per cent of the population. If we accept the same proportion to-day, and we have no reason to believe that it is materially changed, this means

that there are about five million persons who are now dependent upon some form of public relief. One of the most striking indications of the extent of pauperism is the large number of pauper burials. Although we know how desperately the poor will struggle "to give a decent burial to their dead," resorting almost to any means in order to prevent a member of the family from that last disgrace, lying in a pauper's grave, yet "one in every ten persons who die in New York is buried at public expense in Potter's Field."[7]

The extent of poverty. — As in the case of pauperism, it is impossible to give any exact figures in regard to poverty. We can only arrive at estimates which, in turn, are based upon special investigations, reports of relief associations, and such figures as we have in regard to wages, unemployment, and other social conditions which are indicative of poverty. Perhaps the most careful and exhaustive investigations that have ever been made were those made by Booth in London and Rountree in York. Although these investigations were carried on quite independently of each other, each arrived at the conclusion that about 30 per cent of the population were living in poverty.[8] In New York and some of our largest industrial centers, Hunter estimates that the number in poverty rarely falls below 25 per cent of all the people, while in the principal industrial states, in ordinarily prosperous years, this number rarely falls below 20 per cent.[9] In the more purely agricultural states and newer portions of the country, the proportion is considerably less than this. For the country as a whole, and for years of average prosperity, probably as fair an estimate as we can make is that about 15 per cent of all the people are living in poverty.[10] This would make the number in the United States to-day about fifteen million, including of course the five million dependent upon some form of public relief.

Causes of poverty. — Many different attempts have been made to analyze and classify the causes of poverty and pauperism. In making such a classification there is always the danger of a personal bias, — the danger that one will overemphasize a particular cause or group of causes, and in doing this, fail to give due weight to other causes.[11] There are those who are inclined to charge all poverty to the weakness or incapacity of the individual. Others would place the responsibility for poverty almost exclusively upon the bad economic conditions in which a person lives, — upon unwholesome environment. Others ascribe poverty largely to a lack of training or preparation for industrial activity; while still others are inclined to give the greater importance to hereditary influences. In addition to this danger, a serious difficulty is encountered in the classification of causes, in that so many of the causes are so closely interrelated, and the direct cause may, in many cases, be traced back to one or more indirect causes. For example, sickness may be given as the cause of poverty, but this in turn may be due to insanitary working conditions, bad housing, low wages, and consequent inadequate food supply, or intemperance, or other forms of dissipation. A given accident may have been due to purely accidental causes, to inadequate safeguards at the place of employment, or to intoxication. Unemployment may be the given cause, and this in turn may be traced to accident, disease, inefficiency, or various other causes. It must not be overlooked that poverty is both the cause and the effect of certain conditions; as, for example, intemperance is one of the great causes of poverty, while poverty and the misery which accompanies it have great influence in turning men toward drink. Likewise, in regard to sickness, although this is one of the great causes of poverty, poverty is, in turn, responsible for a large amount of the sickness in the country. However, with these warnings, and with full appreciation of these difficulties, there is no



CARTOON FROM "NEW YORK SUN."

Query: Are all men "created equal"?

reason why we should not attempt a general classification of some of the more important causes. Notwithstanding the complexity of the problem, there are certain causes which stand out more or less conspicuously, and regarding the importance of which there is very general agreement on the part of the best authorities on the question. These may roughly be grouped under the three general heads, physical, individual, and social.

Physical.[12] — The Chicago and Baltimore fires, the Johnstown flood and those of the Ohio and the Mississippi rivers, the San Francisco earthquake, and other great national disasters, such as tornadoes, tidal waves, and great storms, cause great destruction of property, and as the result of such disasters, many are thrown, temporarily at least, into poverty. The enormous losses in some of our great agricultural products due to insect pests, and the losses due to epidemics which have at various times destroyed such large numbers of domestic animals, all affect the cost of our living. Such losses, for many families, would be sufficient to crowd them from a comfortable living to a mere subsistence, and sometimes into destitution.

Individual. — *Sickness* has ever been one of the great causes of destitution. We have extended accounts of the waves of destitution and want that invariably followed the Black Death and other great epidemics of the past. It is now supposed that the chronic destitution which is found in some of the formerly prosperous eastern Mediterranean countries has been due to the gradual spread of malarial fever over those districts.[13] Within the past four or five years, we have been hearing much of the hookworm disease which has been found so prevalent throughout some parts of the South, where, in certain localities, the proportion of those affected sometimes runs as high as 60 per cent.[14] There is no question but that this disease is a great source of poverty and destitution in those sections where it has

gotten started. Persons afflicted with it become weak, anæmic, and listless. They lose all ambition, and not only their physical, but also their mental, health is undermined, their industrial efficiency is destroyed, and they settle back in poverty and destitution. We know that in the poorer quarters of our large cities, such diseases as tuberculosis, typhoid, and others are important causes in bringing many to a condition of poverty, and also in keeping them in that condition.

Of the three or four millions of people in destitution in the United Kingdom, Webb says that with regard to at least one third of these, "the recruiting sergeant who brings them in, is sickness." [15] The reports of the many Charity Organization societies, and of the Relief associations in the United States, all show that sickness is one of the most constant causes of poverty. In a very large number of cases where an appeal is made for aid, it is found that sickness on the part of the breadwinner was the principal reason the family had for applying for assistance. It is generally estimated that from a fourth to a third of the distress which comes before the different charity organizations for relief is caused by sickness, and it is said to be an important factor, either directly or indirectly, in at least three fourths of all the cases that come under the care of these societies.[16]

Practically every serious *accident* means either a temporary or a permanent lessening of the industrial efficiency of the one injured. He, and those dependent upon him, necessarily suffer an economic loss. The income which he has been receiving is cut off, and just at the time when there are the additional expenses of doctor's fees and hospital care which must be met. When we consider the number of accidents which happen each year in the United States, it is evident that these must bear a considerable relation to poverty. Such accidents as those necessitating the amputation of hands or feet, arms or legs, or those that cause

blindness, or paralysis, necessarily interfere seriously with the earning capacity of the one injured, and not infrequently result in the complete loss of his wage-earning ability. If the one injured happens to be the breadwinner of the family, as is so frequently the case, there is a danger that the family may be thrown into the destitute class. This is particularly likely to happen if they have been living on or near the poverty line.

Undoubtedly *intemperance* has in the past, in some of the investigations and estimates that have been made, been given too much importance as a cause of poverty. When the statement is made that " nine tenths of all poverty is due to drink," one begins unconsciously to enumerate in his mind all those cases which have come to his notice in which intemperance has not seemingly figured at all. However, for all this, intemperance is a very important cause of poverty, in that the money which should be used to give a family the common necessities of life is often used for drink; and for the want of these very necessities, the family becomes poverty-stricken. Excessive indulgence in liquor also produces weaknesses and disabilities, and the tendency being for the children of alcoholics to inherit these weaknesses, it is easily understood how they follow in the footsteps of the parents, and fall the more easily into a life of destitution and want. Probably the most reliable estimate that we have, and the one most generally accepted to-day, regarding the relation between intemperance and poverty and pauperism, is that made by the Committee of Fifty. In their report their conclusion is that "the general average percentage of poverty, due directly or indirectly to drink, is 25.06," and that " the general average percentage of pauperism due directly and indirectly to drink is 37.05." [17]

It is practically impossible to make any numerical estimate of the amount of poverty or of pauperism that is due to *mental incapacity*, although we do know that this is a very

considerable cause. Of the paupers in our almshouses a large proportion are found to be deficient mentally, and of those applying for aid at our Charity Organization societies, many are found below the general average of intelligence, while a still larger number are found to have had no adequate training for industrial life. Mental ability, alertness, keenness of intellect, good judgment, foresight, decision, are all factors contributing to anyone's success in life. In the same way, the lack of these makes for failure, and as competition becomes keener, those lacking these qualities will more and more be crowded from the poor to the destitute class.

Professor Marshall of England speaks of "*the waste of wealth*" as one of the important causes of poverty.[18] Many of those of small income use poor judgment in the use of that income. Also, there are numerous instances of a woeful lack of foresight, of failure to make any adequate provision for any possible future emergency. There is often a lack of understanding of relative values, and excessive amounts are not infrequently expended on food, clothes, amusements, or business ventures. Not only is there lack of judgment in the purchase of supplies, and waste in the preparation of food, but also the poor have to pay an excessive price because they purchase things in such small quantities. Another example of the waste of wealth is the large amount expended on liquor and tobacco, this averaging about $129 per family,[19] an amount which would go a long way towards keeping some families above the poverty line. The charity workers in our cities, in making their rounds, are constantly meeting just this situation. Families with very small incomes frequently spend an entirely disproportionate amount in ways which contribute little to the family welfare.

Degeneracy underlies much of our pauperism and poverty. A study of a large number of the families appealing for relief within certain sections of our country has shown that a good many of these families were more or less closely re-

lated; that there were certain families in which there seemed to be quite a decided tendency for the various members, generation after generation, to have to be supported by some form of charity. Investigations concerning the inmates of almshouses have invariably shown that the majority were of a decidedly low mentality, and that many of them were from families in which pauperism had been very common. Data collected concerning some twelve thousand persons, inmates of the almshouses of New York, very conclusively showed the influence of heredity as a factor in perpetuating pauperism.[20] It was shown that a large number of these persons were descendants of paupers, and also that large numbers had relatives, brothers, sisters, aunts, and uncles, who were likewise paupers. The conclusion was reached from this investigation that at least one fourth of the children of poorhouse parents become in turn a charge upon the public. Several noteworthy studies of particular families have shown a very close relation between degeneracy, on the one hand, and pauperism, vice, and crime, on the other.

In a study of the Jukes [21] it was found that a very large proportion of this family in each of five succeeding generations became public charges, and that within this family pauperism was seven times as prevalent as in the population of the state at large. The degeneracy of this one family is estimated to have cost the community, within seventy-five years, more than a million and a quarter dollars, to say nothing of the cost of the influence of such a family on society.

A similar investigation of the Ishmaels [22] in Indiana shows a very remarkable pauper record extending back over seventy years. The records of some five thousand individuals have been traced and an appalling record of pauperism, vice, crime, and disease is revealed. "They seem to underrun society like devil-grass."

A more recent study is that of the Kallikak family, by Goddard. This confirms the findings of the two former

investigations in regard to the close relation between degeneracy and pauperism. All of these studies show that symptoms of degeneracy are very marked in particular families, that such degeneracy appears over and over again in succeeding generations, and that, wherever found, it is invariably the cause of a great amount of poverty and destitution.

Bad habits are the cause of a considerable number falling into poverty and want. A person may begin his industrial life with a good position and every prospect of success, but from habits of intemperance, or vice, or shiftlessness, fall from one position to another; and his power of application may become so weakened through such habits as to put him completely into the dependent class.

Among the other individual causes of poverty may be mentioned desertion, or neglect by relatives, death or imprisonment of the breadwinner in a family, and old age.

Social causes. — Under the social causes of poverty may be included primarily those social conditions which are largely determined by society rather than by the individual. While we must not overlook the responsibility of the individual for his own poverty, yet it is probably a conservative estimate that from 50 to 80 per cent of all poverty is due more to economic or social, than to individual, causes. We must keep in mind, however, that these different causes are closely interrelated, and that these social causes do not operate alone "but often in connection with faults of character or physical or mental defects in the individual." [23]

Low wages is one of the most important direct causes, and affects also nearly all of the other causes, both individual and social. An analysis of the expenditures of a large number of families in New York City led to the conclusion that an income under $1350 was not sufficient to maintain a normal standard of life for the average family of five persons; that "an income of $1500 or over probably permits the mainte-

nance of a normal standard, at least so far as the physical wants are concerned"; and that "families having from $1500 to $1700 a year are able in general to get food enough to keep body and soul together, and clothing enough and shelter enough to meet the most urgent demands of decency." [24] As the result of similar investigations in the District of Columbia, the investigators arrived at the conclusion that in that district, $1700 was the minimum amount necessary to support adequately an average-sized family. Of course, the cost of living will vary greatly in different sections of the country, and under varying conditions, but it is generally accepted that at least in the industrial centers of the country, an income of from $1350 to $1800 a year is necessary to maintain an average family of five persons — a man, his wife, and three children — at a fair standard of life; at such a standard as will "maintain the health and efficiency of the family, and insure it against physical deterioration, poverty, and misery." [25]

Turning from these figures of the amount necessary to maintain a decent standard of living, to the question of wages, one finds that about four fifths of the adult male wage-earners receive less than what is considered a decent minimum wage. The average wage of women is considerably less, from three fourths to four fifths receiving less than $850 a year. These figures do not take into consideration the loss in wages due to unemployment, which we have found to be considerable. With such a large proportion of our wage-earners receiving less than the amount necessary to maintain a decent standard of living, it may readily be seen why so many are found in poverty, and why, in case of misfortune, they are forced from poverty into destitution.

From our previous discussion of *unemployment* it is quite evident why this is usually ranked as one of the two or three great causes of poverty. We have seen how unemployment

and irregularity of employment are not only direct causes, but that indirectly they are also important factors in many of the other causes of poverty and want. In the summary of the reports of a number of Charity Organization societies, it was estimated that from 20 to 30 per cent of those who were dependent asked for relief because of lack of employment or of unsatisfactory employment.[26]

Bad housing is both an effect and a cause of poverty. The physical and moral consequences of bad housing are just coming to be realized. Of the dwellers in the dark, damp, ill-ventilated rooms of the crowded sections of our cities, such diseases as tuberculosis, rheumatism, and colds, and the typhoid resulting from impure water and lack of drainage, exact an enormous toll in life and health. Overcrowding admits of no privacy. Home life becomes impossible, when both the physical and moral health of the individual are undermined. The cost of the slum in the increased amount of sickness and of crime, in defectiveness, delinquency, and dependency, means an addition to the burden of all classes; and living under these poor conditions lowers the vitality and efficiency of every slum dweller. The Superintendent of the Visiting Nurses' Association of Chicago, says that two thirds of the delinquent children, and two thirds of the physically ill children, "come from homes where dirty, ill-ventilated rooms predominate," and that of fifty backward children, forty-three "occupied homes that it should have been the business of the state to see did not exist."[27] The Tenement House Commission of New York says that "from the tenements there comes a stream of sick, helpless people to our hospitals and dispensaries — from them also comes a host of paupers and charity seekers."[28] Bad housing is thus seen to be an important cause of poverty, in the added burden that it inflicts upon society, and also in lowering the capacity of the individual to care for himself.

The cost of past *wars* and preparedness for possible future

wars adds very materially to the burden of the industrial classes. The weight of this burden can only be realized when we stop to consider that our army and navy in 1914 were costing us nearly $900,000 a day, and our pensions and our interest on the war debt, about half as much more; making all together more than one and a third million dollars that we were paying every day for past wars and preparation for future conflicts. This item alone absorbed approximately 70 per cent of the total annual expenditures of our government, and meant an average annual burden of about $25 for each family of five persons.[29]

There are a great many *phases of the economic life* of the people which may increase the pressure toward poverty, or may even crowd those on the poverty line on into destitution. In the periods of financial and industrial depression, periods of "hard times," the closing down of industrial concerns increases the number in poverty, and at such times there is always an increase in the number applying for relief in our large cities. Certain forms of indirect taxation, such as the tariff, when levied upon the necessities of life, fall as a heavier burden, proportionally, upon the working class than upon the well-to-do. The kind of taxes and the method of taxation always bear an important relation to the welfare of a community. Methods in industry, transportation charges, and the utilization of natural resources are all important in determining the wealth or poverty of any people. Changes in the demand for goods, and the introduction of new machinery or of new processes, or anything which necessitates a readjustment in industry, are invariably accompanied by increased hardships, at least during the period of readjustment. The increasing number of immigrants coming to our country each year, and particularly in recent times the great influx, from the poorer sections of Europe, tends to lower the standard of living of our wage-earners and makes it more difficult for the working-

man to secure adequate remuneration for his labor. The excessive number of accidents in industry, occupational diseases, blind-alley occupations, and the employment of women and children, all affect the earning capacity of labor. Any social condition or institution which tends to lessen the capacity of the individual to provide for himself must be charged to society as one of the causes of poverty.

Remedies. — When we consider the number and complexity of the causes of poverty, it is evident that there is no one cure-all, or no one line of attack by which we may hope to eliminate this widespread disease from the social body. The attack must be, rather, along the whole line of social weaknesses. Although the problem is so broad as to seem at first most discouraging, yet it has an encouraging feature, in that as we attack the problem of poverty we are at the same time attacking all these enumerated causes of poverty, which are in themselves some of the most serious evils in our present social organization. The mere enumeration of the causes suggests the needed remedies. Many of them we have already considered, together with some of the suggested remedies. As we succeed in decreasing the amount of unemployment and the irregularity of employment, in extending our control over the various preventable diseases, and in lessening the number of unnecessary accidents; as we succeed in eliminating the liquor traffic with its attendant vice and misery, in lessening the number of mentally inefficient, and in curbing those influences which lead toward degeneracy; as we succeed in eliminating the bad housing conditions in some of our great cities, with their physical and moral consequences, in gaining a more equitable and just system of taxation, and in extending the system of industrial education, — just in proportion as we succeed in all these undertakings, may we hope to succeed in lessening poverty, and in decreasing the number of dependents. Various organizations for coping with the prob-

lems of poverty, such as Charity Organization societies, associations for Improving the Condition of the Poor, and Associated Charities, have existed for some time past in our cities. Such organizations have not only been of great benefit in relieving the distress due to poverty, but have been of value also in gathering and publishing information in regard to the conditions. They have lessened the abuses of indiscriminate giving, and have assisted many individuals and families back into a position of industrial independence. Large numbers of dependent children are being cared for by different children's associations. Homes are established for the aged. All these institutions, and many others, tend to lessen the misery of poverty. They are necessary in the present stage of development, but our greatest efforts must be bent, not toward relieving the poverty-stricken, but toward the prevention and elimination of those conditions which make for poverty.

Poverty *versus* wealth concentration. — Poverty is a relative term. We have used it to denote that large class who are just unable to obtain such necessaries as will permit them to maintain a state of physical efficiency, down to those who are living in utter destitution. Above this line are found those large numbers who are able to provide a comfortable living, and even to enjoy some of the luxuries of life. At the upper extreme of this scale are found the comparatively few families with their superabundance of wealth. Many would claim that this extreme concentration of wealth is one of the chief causes of poverty. There is no question but that it is at least a very important contributing cause.

A careful study [30] has recently been made in regard to the average wealth of the families in Massachusetts and Wisconsin, two of the states having the most complete records in regard to property ownership. Comparisons were made between the concentration of wealth in these two states

and concentration in the United Kingdom, Prussia, and France. One of the most striking features in this study is that the curves showing the degree of concentration in Massachusetts are almost identical with those of Wisconsin; while both of these, in turn, show but very slight variation from the curves which show the concentration of wealth in the United Kingdom, France, and Prussia. A slight variation is found in the chart of the United Kingdom, showing a greater concentration there than in other countries. In the United Kingdom, the poorest 65 per cent of the inhabitants possess only about one sixtieth of the property; while one two-hundredth of the population owns half of the property. In none of the countries studied did the poorest 65 per cent control more than about one twentieth of the property. In Massachusetts and Wisconsin, which probably typify conditions throughout the United States, it was found that more than one half, almost three fifths, of the property was possessed by 2 per cent, or one fiftieth, of the people; and that almost one fourth of the entire property was possessed by one four-hundredth of the people. A comparison of the present-day conditions of wealth with the conditions several decades ago leads to the conclusion that the rich are growing decidedly richer, and that the poor are "also gaining in wealth, though relatively at a less rapid pace than the rich."

It is apparent that such concentration of wealth as these figures indicate, such control over the resources of the country in the hands of a very few, may prevent the wage-earner from receiving a fair return for his labor. A monopolistic control of any natural resource, or of the capital with which further wealth is produced, may, and invariably does, result in an excessive share of income going to property rather than to services. Thus, inequality of wealth is not only an accompanying feature of poverty, but, through inequality in the control of the means of production, may

also be a very important factor in preventing the wage-earner from getting his fair share in distribution, and thus in crowding him down into poverty.

QUESTIONS

1. What changes are taking place in our attitude towards poverty?
2. Distinguish between poverty and pauperism.
3. What is said regarding the extent of pauperism in the United States?
4. What estimates are made regarding the number of poor? Upon what are these estimates based?
5. Classify the causes of poverty.
6. What are some of the physical causes of poverty?
7. What is said regarding sickness as a cause of poverty? Accidents? Intemperance? Mental incapacity? Degeneracy? Mention other individual causes of poverty.
8. What is said regarding low wages and poverty? Give some of the principal facts regarding low wages in the United States.
9. In what ways may unemployment be said to be a cause of poverty?
10. What relation has bad housing to poverty?
11. What is said about the cost of war?
12. Mention other phases of the economic life which may increase the pressure towards poverty.
13. How must we attack the problem of poverty? What are some of the principal remedies suggested?
14. What is said regarding wealth concentration in the United States?

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CHAPTER XV

CONSERVATION OF NATURAL RESOURCES

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The United States, as compared with most of the other great nations of the world, is a comparatively new nation. The more energetic and the more venturesome of the older nations came here not only to make a living, but to make a good living. They found here the greatest undeveloped resources that have ever been opened up before any people. Here were fertile farmlands, great areas covered with rich

timber, and unbounded mineral wealth, all directly available to the early pioneer. With such unlimited resources so freely open to all who came, is it any wonder that our people became engaged in the mad scramble of exploitation! With such possibilities of securing enormous fortunes, the thought was not only to get rich, but to "get rich quick." In the haste to accumulate wealth, but little regard was given to the needs of future generations, and, as a result, the world has probably never seen such a reckless waste of natural resources as has taken place within the United States during the past century.

Forests. — *Depletion of forests.* — Of the total area of the United States, about 45 per cent, or nearly one half, was originally covered with forest;[1] a forest "which for extent and value was not equaled by that of any other civilized nation." Such valuable timber as this afforded a rare field for exploitation. In the cutting of the timber, the few best trees were selected and the rest destroyed. Of that cut, much was wasted. No consideration was given to preserving the young trees, or to utilizing more than the best portion of the tree when cut. In the desire to obtain tillable land, the only thought was to get rid of the trees, and consequently timber of enormous value was burned, as the quickest way to clear the land. We have also permitted vast areas to be destroyed by forest fires.

As a result of this indifference toward protecting the forests, our total forest area is only about 65 per cent of what it formerly was. This means that at the present time about 29 per cent, or a little more than one quarter, of our total area is forest region.[2] Of this remaining area, however, portions have been burned over, much of the best timber has been cut, and much of that remaining is inaccessible, so that it is estimated that in the brief century and a quarter that the nation has existed "approximately one half of the value of our forests has gone."[3]

Conservation in Germany. — That our forests will soon be depleted unless measures are taken looking toward their preservation, is indicated by the fact that at the present we are cutting our timber more than three times as fast as it is produced.[4] At this rate, it is easy to see that the value of our timber will very soon be abnormally high. Germany passed through much the same experience as the United States in the early part of the last century, but did not reach such extremes in exploitation, and early became aroused to the necessity of regulating her forests. As the result of scientific regulation, it is estimated that whereas her forest area is only about one fifteenth of that of the United States, her forests contain more than one fifth as much standing timber as does our forest area.[5] The present growth of American forests is about twelve cubic feet of wood annually per acre.[4] Germany, with no greater natural advantages for producing timber, produces a little more than four times as much as this. This is because of the difference in the ways that the forests are managed.

It is not for the timber alone that we need more careful administration of our forests. They are a most important factor in the regulating of our water supply, where great amounts are used for irrigating purposes throughout the West, as well as in the checking of waste through excessive floods. It is said that the national forests "protect the headwaters of every important western river." The forest areas also, for a part of each year, support one half of the sheep, and nearly one tenth of the cattle, of the western range.[6]

Legislation for conservation. — It is only within the past few years that we have come to a realization of the enormous wastes that have been taking place. The first legislation looking toward the conservation of our national forests was passed by Congress in 1891.[7] This law gave the president of the United States the right to set apart any public land

bearing forests, as forest reservations. Since that time various areas have been withdrawn by successive presidents, until now the national forests contain about one fifth of the standing timber of the United States.[6] Nearly three fourths of the national forests are within the Pacific states, and about seven eighths in the Pacific and Rocky Mountain states. A Bureau of Forestry was established in the United States in 1897. Gifford Pinchot was appointed chief of this bureau in 1898, and continued in this position until 1910. He has, throughout, been one of the leaders in this movement toward conservation. Our forest service seeks, as expressed by the Chief Forester, the use of present resources; permanency of these resources; and greater and more valuable resources for the future.[8]

Administration of our national forests. — The annual cost of administering our national forests is about $3,000,000. The amount is expended for the protection of timberland as valuable public property, for the increased yields of water, wood, and forage, and for the permanent improvement of the forests. Timber is protected primarily against fire by a field force of 5000 men, or an average of one man to fifty square miles. The land is protected against fire losses and overgrazing. The fire often entirely destroys the soil and overgrazing reduces the production of forage and timber.[6]

With a yearly expenditure of less than three cents per acre the following results were secured by the forestry bureau: [6]

(1) A very material reduction in the fire loss through organized protection against fire.

(2) The harvesting of about 500,000,000 board feet of timber "under government supervision, by methods which not only insure a renewal of the timber crop, but also lessen the fire hazard, and improve the remaining stand."

(3) Additional reforestration of denuded land of some 30,000 acres annually.[9]

(4) Water conservation throughout the mountain regions

of the west, including the protection of the water supply of many cities and towns.

(5) Better utilization of the forage crop through better methods of range management. Nearly 1,500,000 cattle and horses, and 7,500,000 sheep and goats, use the range annually under a carefully devised system which prevents overgrazing and other wasteful methods.

At the present time, the forestry service is opening up new systems of roads, trails, and bridges, is clearing fire lines and building lookout towers, is establishing ranger stations and connecting the same by telephones. Through the extension of this work and with more men for patrol, it is believed that the fire loss may be very materially lessened, and that we may have a much fuller utilization of the growing timber, forage, and stream-flow of our forest areas.

Wastes that may be eliminated.[10] — In addition to the increase in the product through more careful management, it is possible to eliminate much of the waste. It is estimated that the loss by careless cutting is not less than 25 per cent. This comes through the cutting of immature trees, the leaving of high stumps, the careless destruction of young trees, carelessness in felling the trees whereby the tree is often shattered, through reckless "driving" when many trees are lost, and by failure to utilize all of the usable parts of the trees which have been blown down.

Another great waste that may be eliminated comes in milling and manufacturing. It is estimated that there is a total loss from all sources in the mill of about 49 per cent of the entire volume of the logs. This results in a large amount of material being thrown into the waste heap. As an example of the unnecessary loss, it is calculated that if the thin band saws should be used instead of the heavy gang saws, this "substitution alone would increase the lumber from the logs now cut by 2,250,000,000 board feet, all of which now goes into sawdust."

In securing tar, pitch, and turpentine, from the southern forests, the trees are hacked several inches deep. This greatly weakens the trees, and after a few years they fall. Through more careful methods, the yield cannot only be increased by about 30 per cent, but the life of the tree, instead of being three or four years, is increased to fifteen or twenty years.

Methods have been discovered by which wood is made less susceptible to destruction by decay, insects, or fire. If this preservative treatment were applied to all merchantable timber, there would be a saving of about 12 per cent of the timber used. This treatment would not only save the timber, but would also lessen the amount of constructive work necessary. The cost of the work in maintaining wood structures, as a result of the use of this preservative treatment, would be lessened about $2,000,000 a year.

In the manufacturing of wood products, an enormous amount of refuse, such as sawdust, shavings, slabs, barks, and trimmings goes to waste. In Germany, such material as this is used in the manufacture of various chemical products, such as acetic acid and wood alcohol. It is estimated that 36,500,000 gallons of turpentine, or more than is at present produced in the United States, might be produced from the waste parts of the southern pine, the stumps, slabs, and sawdust. We are hearing much about exhausting the supply of wood pulp in the making of paper, yet more than five and a half times as much as is used, is wasted through not utilizing the tops and the slabs of the various soft woods that might be made into pulp.

Perhaps the greatest loss to our timber has been through forest fires. The losses by fire have been about equal to the timber cut. An investigation of some twenty-five fires in the Rocky Mountains in 1907 showed that about one fourth were started by locomotives, one fourth by campers,

one sixth by lightning, and the rest in various ways. The loss by fire has varied greatly from year to year. Some years there are great forest fires when millions of dollars' worth of property are destroyed by a single fire.

From 1880 to 1896, the average annual loss from fire in standing timber was about $50,000,000 and in the cost of reforesting, about $50,000,000. In other words, what we lost annually for a number of years, was about a hundred million dollars. The annual loss of life has been about fifty. It is estimated that these fires might have been prevented by an expenditure of one fifth of the loss. In Prussia, with her splendid system of fire patrol, the average area annually burned over is only .02 per cent of the total area.

We are now beginning to attempt the control of forest fires. About one half of the states have organized forest fire protective systems, and a number of the states have passed legislation requiring greater care on the part of the railroads, campers, and hunters, providing for the establishment of fire lanes and fire patrols, for the burning of slashings, and, in other ways, have attempted to prevent fire losses. In these ways, within the national reserves we have approached the percentage of loss that is found in Germany, but less than 1 per cent of the privately owned forests have any efficient system of fire protection.

Other enormous losses result from great areas of cut-over and burned-over land being left idle, and from the pests of insects which often destroy extensive forest areas. The report of the United States Forest Service says: " Under right management, our forests will yield over four times as much as at present. We can reduce wastes in the woods and in the mill at least one third. Preservative treatment will reduce by one fifth the quantity of timber lost in the water and in the ground. We can practically stop forest fires at a total yearly cost of one fifth the value of the standing timber burned each year. We shall suffer for timber to

meet our needs until our forests have had time to grow again, but, if we act vigorously and at once, we shall escape permanent timber scarcity." [11]

National versus state control. — Naturally, the first attempts at national regulation met with serious opposition, particularly from those who were making enormous gains through exploitation. Recently the struggle has rather centered in the question of "State *vs.* National" control. The leaders in the movement for a complete system of control have almost invariably been in favor of Federal control, while those who have had the welfare of the special interests first in mind have quite as invariably favored turning the national forests over to the states.[6] A number of the states, anxious for quick development, have been wanting to have this control exclusively within their own hands, but, judging from our experience within the last few years, there seems to be justification for the statement made by our Chief Forester, "Once public ownership is surrendered, the three great resources of the forests — timber, water, and forage — are readily monopolized for private advantage." [12]

Among the reasons why the national forests should not be turned over to the states are the following: it would entail the creation of many forest services instead of one; but few of the states have adequate machinery for getting and retaining, regardless of political considerations, efficient men for the work; the forests, the streams, and the range do not stop at state lines, but are a national resource and affect the prosperity not merely of a section, but of the whole country.[6] When we consider the enormous values tied up in our forests, the national interest in the future timber supply, the importance of vast quantities of forage, the twelve million horse-power of undeveloped water power throughout these areas, the protection of the navigable rivers and of the great amount of water which is and may be used for irrigation, — when we consider all these items, we begin to

realize the importance of a wise, national control for our forest areas.

The various state forests of Europe have been scientifically managed for some years past, and are now being kept not only in an excellent state of preservation, but also in many cases are yielding to their respective state governments a net annual revenue of from a dollar and a half to four dollars and a half per acre. This is in addition to the cost of keeping up a splendid system of roadways through the forest areas. The Prussian government in 1914 realized from its 6,000,000 acres of state forests a net return of about $9,000,000. The forests furnished employment for some 150,000 men and women, and, although yielding this large revenue, their condition was not impaired, but their value has steadily increased. A large proportion of this land was mountainous or rocky, and would have been quite unfit for agriculture. "Besides furnishing the material for various industries, and supporting a large population, these areas yield many indirect benefits, such as beauty of scenery, improvement of climate, pleasure resorts for the people, supply of water in streams, and covert for the game." [13]

Water. — The conservation of water is of the greatest importance from the standpoint of the water supply, the water power, navigation, irrigation, the prevention of excessive floods, and the checking of soil erosion.

Water supply. — The first of these is of much importance, although the value is not often reckoned in dollars and cents. This may be seen in the fact that the average daily amount of water used for each person varies all the way from one hundred and ten gallons in New York City, to two hundred and ten gallons in Philadelphia. Some of our greatest epidemics, particularly those of typhoid fever, have been caused by an impure water supply. With the rapid growth of our city population, one of the greatest municipal problems has been that of securing an adequate supply of

pure water. Some of the boldest engineering achievements have been the constructing of great aqueducts for carrying water into the cities from the mountain or lake regions miles away. One of the most notable of these is the one over two hundred miles long, recently completed at Los Angeles, at a cost of some $24,000,000, and designed to bring to the city daily two hundred and sixty-five million gallons of water. Huge filtration plants have been built by a number of our large cities, until now it is estimated that about one seventh of our population is supplied with filtered water.[14]

Water power. With the development of the transmission of power, the water power of our streams becomes of increasing importance. From many of the important falls power is now being transmitted from one hundred to two hundred miles. As we have seen, we are now utilizing some six million horse-power in this country which is derived from our rivers, and it is estimated that if we were to use the rest of the available water, we would have from seven to ten times the amount now produced. One of the most remarkable recent achievements was the damming of the Mississippi River at Keokuk, Iowa. The plant located here supplies about one hundred and fifty thousand horse-power, and provision is made for a subsequent increase to about double this amount. This power is transmitted to neighboring towns, including St. Louis, a hundred and forty miles distant.[15] With the diminishing supply of coal, water power is becoming of increasing importance. Many of our railroads are now using electrical power, and our street railways are almost exclusively electric. An increasingly large amount of this electrical energy is produced from the water power. One of the problems of the present time is the developing of a system of reservoirs throughout the country in order to conserve the water power. The utilization of such power would result in a saving over the use of steam, of some $30,000,000 per year.[16]

The great possibilities in the *control* of the water power

have been recognized by our capitalists, and many of these water sites have been bought up for speculative purposes. The concentration of control is indicated by the fact that 65 per cent of all the developed water power in the United States is now controlled by ten groups of power interests.[17] This increase in concentration of control and the serious menace to the American people from such control led to the following resolutions of the Fifth National Conservation Association: "We recognize the firm and effective control of water power corporations as a pressing and immediate necessity urgently required in the public interest; we recognize that there is no restraint so complete, effective, and permanent as that which comes from firmly retained ownership of the power site; therefore it is the solemn judgment of the Fifth National Conservation Congress that hereafter no water power now owned or controlled by the public, should be sold, granted or given away in perpetuity, or in any way removed from the public ownership, which alone can give a sound basis of assured and permanent control in the interests of the people."

The reasons for public control are thus summarized by President Van Hise.[18] Public control is necessary to secure reasonable charges, the full development of the water power, and public safety through the control of dam construction; and it will guard against the terrible loss of life and property which has resulted from the breaking of some of the great dams.

Navigation. — There are two hundred and ninety-five rivers in the United States which are used for commercial purposes. These furnish about twenty-six thousand four hundred miles of navigable water. Only about a fifth of this distance, however, has a navigable depth of six feet, or more, and the Mississippi system alone furnishes about two thousand five hundred miles of this. About four thousand five hundred miles of canals have been constructed, but more than

half of this mileage has been abandoned.[19] In the early part of the last century, much attention was given to canal construction. Later, the remarkable development of the railroads rather supplanted the interest in canals. At present, interest is being renewed in inland water transportation, and many extensive projects are now under way. Some of the most important of these are the deepening of the channel of the Mississippi, the Ohio, and the Missouri rivers, the enlarging of the New York state barge canal, the canalization of the Columbia River from its mouth to Lewiston, Idaho, a distance of five hundred miles, and the intracostal waterways from Maine to Florida.[20]

The advantages resulting from the development of the waterways, as summarized by President Van Hise, are:

(1) The freight rates will be reduced for a large part of our traffic.

(2) The congestion of the railroads will be relieved.

(3) The storage of the storm waters in reservoirs will make the water in streams less impure.

(4) There will be an immense reduction in flood damages.

(5) There will be a reduction in the denudation of the land.

(6) Large areas of land now flooded and made swamps and marshes will be reclaimed.

(7) The storing of the storm waters will greatly increase the available water power.[21]

An estimate is made by McGee of the saving that might reasonably be expected from an annual expenditure of $50,000,000 for the next ten years. He says, "There would be an annual saving in transportation of $250,000,000, an annual saving from flood damage of $150,000,000, an annual saving from forest fires of $25,000,000, an annual benefit from cheapened power of $75,000,000, an annual saving of soil erosion of $500,000,000, a total of one billion dollars per annum. The proposed expenditure is at the rate of sixty-

two and one half cents per capita annually. The saving is at the rate of $12.50 per capita, or twenty times as much." [22]

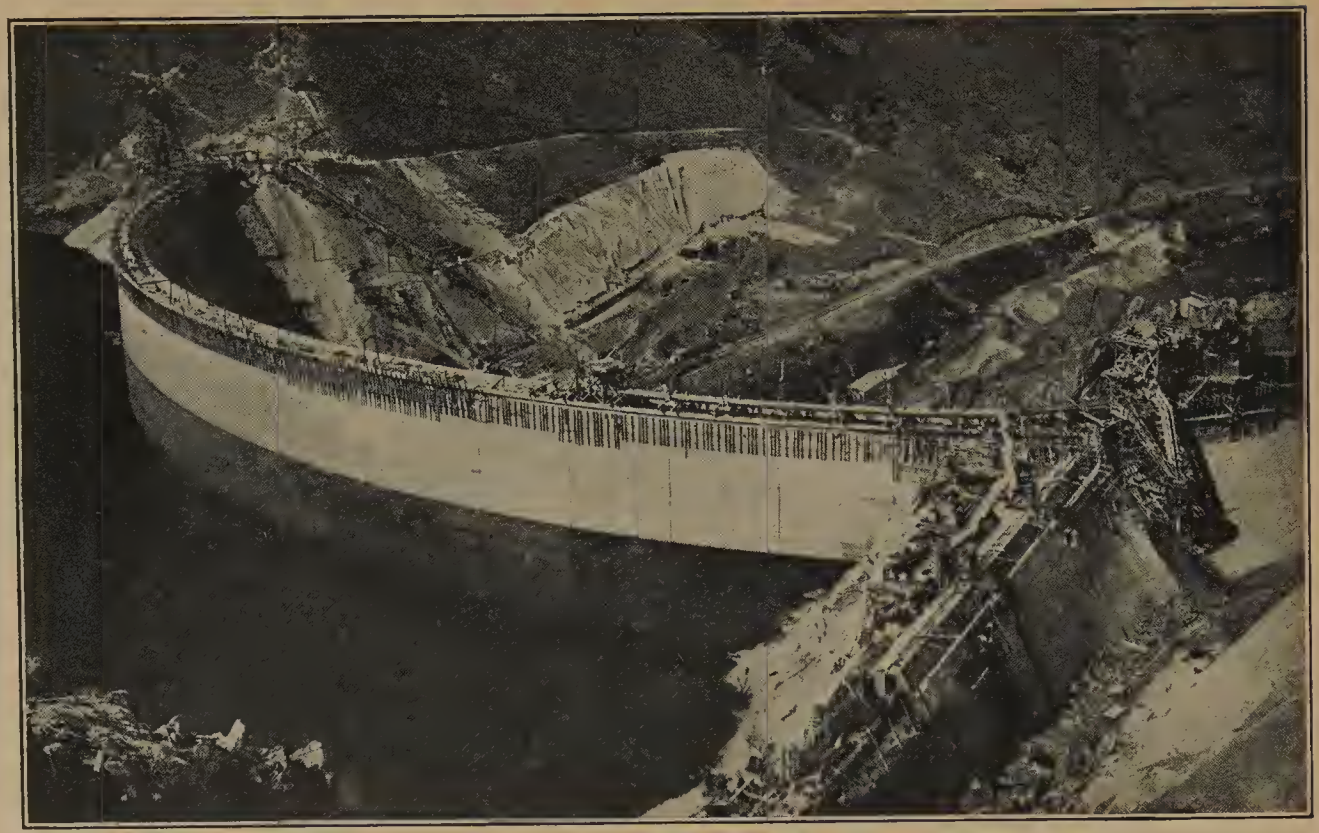
Irrigation. — Through irrigation, great areas in the United States which would otherwise remain unproductive are being brought under cultivation. About one third of the area of the United States has an average annual rainfall of less than twenty inches.[23] This is the amount below which irrigation is necessary in order to get the best results. Up to the present time, some 14,000,000 acres have been brought under irrigation.[24] This work was first undertaken on a large scale as a result of the Cary Act (1894) which granted certain desert lands to the states on condition that they provide for their irrigation; and the Reclamation Act of 1902, which provided for the building of irrigation works, and set aside for that purpose money from the sale of public lands in the West. Some enormous projects have been carried out under this act, and many areas, formerly considered practically worthless, are now valued at from $150 to $500 per acre, and some orchard tracts from $1000 to $1200 per acre. Most of these reclamation projects plan to furnish water annually of from one and one half to five and one half feet in depth over the entire surface. In 1918, the United States Reclamation Service furnished water for a little more than 1,000,000 acres, although water was ready for nearly 600,000 acres more. The government now has projects under way which will provide for irrigating approximately 4,250,000 acres. This is about one seventh of the estimated area that is capable of being irrigated.[25]

As our population increases and the better farming lands are all brought under cultivation, there is a steady movement toward the utilization of these drier areas. Through irrigation, these lands will be able to support great numbers of people. With this increasing demand for the use of water, new problems arise. With any resource, when it is found in unlimited quantities, there are practically no restrictions

as to ownership other than "first come, first served." But as the resource becomes more scarce, there is always a tendency toward a monopolistic control, and the many who did not share in the original free distribution, are compelled to pay a high price to the few who were successful in gaining control. This has been our experience with practically all of our resources, such as land, coal, iron, petroleum, and other sources of mineral wealth, water power, and now of water itself. The two principal problems that have arisen out of the extension of irrigation are: (1) how to lessen the waste in connection with the use of water, and (2) how to secure fairness to all in the distribution of water.

As in the utilization of all natural resources, we find enormous wastes in the use of water. The principal losses are due to its reckless use. In most cases, the farmer is not charged for the amount of water used, but contracts for a sufficient amount to irrigate a certain tract. This naturally leads to an abuse of the water supply. There are other losses through the fields being poorly prepared, so that the water does not spread over them uniformly. In these cases, more water is used than is required. This, too, would be remedied through charging for the water on the basis of the amount used. Another great loss is through leakage because of the careless construction of the conduits, and through seepage. Many of the canals are constructed through open, porous soil. At the present time the loss of water in irrigation averages about 25 per cent; in other words, if this water that is wasted were utilized, it would be sufficient to irrigate some three million acres. Granted that this land was thereby made worth a hundred dollars an acre, this would mean an increase of wealth of about $300,000,000, aside from the value of the crops that could be raised on such acreage.[26]

The question of justice in the distribution of water pre-



ARROWROCK DAM, NEAR BOISE, IDAHO, 348 FEET HIGH.

The highest dam in the world.

sents a more complex problem. Such questions arise as those of prior claims, the diverting of water from its original course, the abuse of water privileges, and the proportioning of water available for use. Many cases of dispute have been taken before the courts, and several states have passed legislation looking to the control of water rights. A number of the states are now buying up, at enormous cost, the sources of water supply and power, in order to get this control back into their own hands. After securing this control, they grant the privilege of use only under conditions which aim to secure justice for all.[27]

Minerals. — The forest products may be replenished, and with proper care may be made to supply our needs through the successive years. Water, likewise, replenishes itself from year to year, and only needs to be collected and controlled. With our mineral resources, however, once they are mined, they are mined for all time. The supply cannot be replenished. The metals may be used over and over again, thus materially adding to the total supply, but when once the mineral fuels are used they are gone forever. Strange as it may seem, these latter have been the most recklessly dissipated. The United States has far greater mineral resources than has any other nation. The annual value of the mineral products is now about two and a quarter billion dollars.[28]

Coal.[29] — The four great mineral fuels are coal, peat, petroleum, and natural gas. Our dependence upon these products for fuel goes back a comparatively short time. Coal is the most important of all the mineral products. The amount available is definite, and when a ton of coal is once mined and burned it is lost for all time. Practically all of the anthracite coal deposits of the United States are found within a small area of about four hundred and eighty square miles, in Pennsylvania. The bituminous coal is scattered over a much greater area. The aggregate coal area is said

to be about five hundred thousand square miles, or 13 per cent of the total area of the country.

There has not only been a great increase in the amount of coal used, but also the per capita increase has practically doubled each decade since 1850. With this very rapid increase in the use of coal, and with a limited supply, the question naturally arises as to how soon this supply will give out. If exploitation should continue to increase at the same rate, the entire coal supply would be exhausted in less than a hundred and fifty years. Comparing the amount of coal that has been mined and wasted with the total amount that is estimated to exist in the United States, we find that about 98 per cent of the original amount is still available. Consequently, if measures to prevent waste be taken soon, this resource may be preserved for a long time to come.

The wastes in the mining of coal have been enormous. It is estimated that for every ton of anthracite mined, from one to one and a half tons have been wasted in mining; and for every ton of bituminous coal, at least half a ton has been thus wasted. Among the wastes in mining may be mentioned the leaving of great pillars of coal to hold up the walls when other systems of support might be used; the taking of the coal from the more accessible seams first, often leaving other seams in such condition that it is almost impossible to mine them; and the throwing away or burning of thousands of tons of slack. The amount of this slack might be lessened by more careful methods of mining, and the amount that is produced could be mixed with coal tar and used in the form of briquets. It is estimated that with care these wastes might be reduced to 15 per cent or 10 per cent of what they now are. In some of the better developed mines, the waste has practically reached this figure.

Another great waste is in the use of coal in the beehive coke ovens. It is said that by substituting the retort oven, such as is used in nearly all European countries, there would

be saved practically $50,000,000 a year. Imperfect combustion accounts for a great deal of waste. From a fifth to a third of the coal is lost in this way. This loss could be appreciably lessened through the use of mechanical stokers. It is estimated that at least 20,000,000 tons of coal, representing a value of $40,000,000, go up the chimneys in smoke each year. The damage to the city, however, from the settling down of such a pall of smoke and soot, is from ten to twelve times this amount. The loss to health, although it cannot be estimated in dollars and cents, is even greater. Air which is continually laden with smoke seriously affects the lungs and weakens the body. Experiments are being made all the time, looking toward a better utilization of the coal used in the production of steam. At present, the average steam engine "does not develop into power more than 5 to 10 per cent of the heat energy." If due care is given to reducing the wastes in mining, to utilizing the coal slack, to substituting the retort oven for the beehive, and to eliminating the smoking chimney; and if further discoveries be made leading to greater efficiency and to the substitution of water power for coal, there is no reason why our coal should not last much longer than a hundred and fifty years.

Another great problem is the control of the coal lands. Many thousands of acres have been ceded away for practically nothing, and others sold at from a fifth to a fiftieth of their real value. Many of the coal lands of Colorado, with a royalty not to exceed eight cents a ton, would yield $5000 an acre, yet a large portion of these lands have been sold at from $10 to $20 per acre. We came near losing the extremely valuable Alaskan deposits in the same way, but fortunately a large proportion of these lands was withdrawn from public entry, and their value thus preserved for all the people. It is being strongly urged by those interested in conservation, that there be no further sale of the public coal lands, but that they be operated under the lease sys-

tem. The particular advantages of this system are that the leases could be made of various-sized areas; that conditions could be imposed which would lessen the amount of waste; that a royalty per ton could be charged upon the amount of coal mined; that under this system, the prices could be controlled by the government; and the exportation of coal might be restricted if it were advisable.

Peat.[30] — Although as yet we have not begun to use peat to anything like the extent that people do in Europe, there are about eleven thousand square miles which have a commercial value, or are likely to have a commercial value in the future.

Petroleum[31] has been found in various sections of the United States. Some yields have averaged as high as 10,000 barrels per acre. The total amount extracted has rapidly increased in the last few years, but here, again, as with coal, the total amount is limited, and more so than with coal. The production from many of the older fields, such as those of Pennsylvania, New York, and West Virginia, has greatly fallen off. Oklahoma is now producing more than any other state, and the four states, California, Kansas, Texas, and Oklahoma, produce over two fifths of the total yield of the country.[32] It is estimated that if the present rate of increased exploitation should continue, and no further fields be discovered, our supply of petroleum will be exhausted by about 1935; that is, the present known supply will not last us longer than twenty years. Of the total amount produced, about one fifth is used for power, and about one fifth is exported. Owing to the limited amount of this product, it has been proposed that that remainder should be conserved by substituting other products for power, and by prohibiting, or at least limiting, the amount exported. It has also been suggested that the government shall not sell any more of the public petroleum lands, but that such lands shall be leased.

Natural gas.[33] — Although natural gas is an ideal fuel, and although the amount of it is very limited, there is " no natural resource which has been so carelessly used and recklessly wasted by the American people as this one." An important source of waste has been the great pressure when the bores reached the material, a pressure so great that it is difficult to cap the wells; but more frequently the waste has been the result of mere carelessness or indifference. Often, when boring for oil, gas is struck, and if oil is not found, the wells are simply lighted and allowed to flame. In some cases the surrounding rock has sunk, and the gas escapes from wide areas so as to form flaming fields. The Caddo field in Louisiana is cited as such a lake, where it is estimated some seventy million cubic feet of gas were burned daily " without doing any good, in any way, to anybody." This was said to be enough to light ten cities of the size of Washington, or equivalent to the waste of ten thousand barrels of petroleum daily. Often the oil producer has permitted the gas found along with the oil wells to escape into the air, and there has also been large loss in transmission of gas through carelessly constructed pipes. In these various ways, the estimate is that at least one billion cubic feet of natural gas are wasted daily, and this has a heating value equal to about a million bushels of coal. We are permitting such wastes as this to go on, even though it is estimated that if this continues, the supply of natural gas will be practically eliminated by the end of another twenty years.

Metals.[34] — Of the metals, iron is undoubtedly the most important. The exploitation of the iron ore is comparable only to the exploitation of coal. Not only has there been a remarkable increase in the total amount produced, but the amount produced per capita was seven times as great in 1907 as it was in 1870. It is estimated that if the rate of increase of exploitation of iron ores of the last three decades be continued, the high-grade ores now available will be

exhausted in about three decades more. There are various reasons, however, for believing that the available ores will last for a longer time than this. Greater care will be taken in the mining of ores, and ores of a lower grade will be used. It is quite possible, also, that new deposits may be discovered. Cement and stone are now being substituted for iron in much of the construction work that is going on, particularly in bridges. It is quite possible that imported ores may be used. There is an increasing store of metallic iron which will be used over and over again, as iron becomes more scarce.

Of the other metals,[35] copper, lead, zinc, gold, and silver, there are losses in connection with mining, because in our zeal to get quick profits, much of the low-grade material is left behind. There are losses in extraction, although with the introduction of the newer methods these are not so great as formerly, and, finally, there are losses of the by-products. The loss in the mining of lead is about 15 per cent, with a further loss of from 15 to 30 per cent in concentrating and smelting, so that often not more than half of the material of the ore in the ground is finally recovered as metallic lead. The per cent of zinc lost is even greater than that of lead. The wastes in mining are about the same as in lead, but the wastes in concentration and smelting are greater. In Missouri, where nearly half of the zinc is produced, the recovery of metal is not more than one third of the amount in the ore. The wastes in the mining of gold and silver have not been so great as in other metals, although the losses are still considerable, both in the mining and in the extraction of these metals.

From the facts given, it is evident that legislation is needed for the conservation of our mineral resources, legislation directed against these various wastes in mining and smelting, requiring the utilization of the by-products, and particularly looking toward the regulation and control of the public mineral lands. Those interested in conservation strongly urge

that all the mineral lands now owned by the United States, or the states, should be retained as public property, and operated on the lease system.[36]

Land. — A fertile land is the most valuable resource that any people can have. Not only the food supply, but the products from which clothing is made, come either directly or indirectly from the land. The density of population which any area can support is dependent upon its fertility. This fertility in turn depends on the thickness and character of the soil. The soil has been manufactured by processes of nature extending over thousands of years. The average rate in the making of the soil is estimated as less than an inch in five hundred years. Because so much depends upon the soil, its conservation becomes a most vital question.

Carelessness in the granting of public lands. — It is a little late to consider the conservation of the land areas, as so much of the public land has already been disposed of. The great areas that were added to the original territory were purchased at an average cost of about 5.1 cents an acre.[37] Having such vast areas to be disposed of, but little consideration was given to their real value. Much of the land was sold at from a few cents to a few dollars per acre. Later, great areas were granted to private individuals under the homestead acts to encourage the establishment of homes in the newer sections. Also large grants were made to the railroads and other corporations, with the idea of fostering internal improvements. Further areas have been granted to the states for educational and other purposes. These lands were often disposed of at but a fraction of their real values. In the disposal of such great values, it is little wonder that fraud and corruption were so frequently found. In 1913, investigations were made by the Land Office, and, as a result, over eight hundred thousand acres were restored to the public domain. Of this amount, nearly one half was for

fraudulent entries, and most of the remainder for unlawful inclosures. Of the total land area of the United States, about three hundred million acres still remain unappropriated and unreserved.[38]

Farm lands.[39] — According to the last census, the land in farms represented a little less than one half the total land area of our country. More than one half of this, or one fourth of the total land area, was classed as improved land. This area is yielding an annual return in farm products, valued at about fourteen and a quarter billion dollars.[40] However, such returns as these cannot continue without decreasing the fertility of the land. The fertility of at least half of the land is thought to be less now than it was formerly. During the past forty years, notwithstanding the great improvements in the farm crops, the introduction of new varieties, the use of better seeds, and improvements in cultivation and the rotation of crops, the average annual yield has remained almost stationary. The only reasonable explanation that can be given for this is that large areas have become depleted. In striking contrast with the situation which prevails here, and indicating what may be done through the conservation of the soil, many of the countries of Europe have an average yield per acre of 50 per cent or more in excess of that of the United States; and this notwithstanding the fact that these lands have been cropped for centuries.

Mechanical erosion of the soil.[41] — The two principal causes of the deterioration of the soil are mechanical erosion and the loss of essential elements. Erosion is going on all the time. Striking evidences may be seen after any severe storm, when great amounts are washed down the hillside. Often great gullies are formed, which render the land unfit for tilling. There are several factors which affect the rate of erosion, such as the steepness of the slope, the character of the soil and the subsoil, and the care which is given the land

Through carelessness in plowing and in leaving the fields denuded of grass or forest, erosion has taken place much more rapidly than under more natural conditions. It is estimated that because of a lack of knowledge of proper practice, and because of neglect, some four million acres have been so deeply eroded as to be totally destroyed, and a larger area injured to varying degrees.

Among the suggestions made for checking erosion are: (1) deeper tillage so that the soil may absorb more of the water; (2) contour plowing, that is, following the general level of a hill, rather than making furrows leading down into the valley; (3) the forming of terraces; (4) the foresting of steep slopes; (5) the controlling of the gullies by a covering of grass, or in case the slopes are steep, with shrubbery. It may even be necessary to construct brush dams to hold the soil back. In these various ways the losses due to erosion may be checked.

Loss of essential elements.[42] — The soil contains various elements which are essential to plant growth. Some of these, such as oxygen, hydrogen, carbon, and others, exist in such quantities in the atmosphere, in the water, and in the soil, as to be practically illimitable in amount. Consequently we are not concerned in their conservation. There are other elements, such as nitrogen, potassium, and phosphorus, which are most essential to plant growth, and through plant products, as food for man.

There are certain crops, such as grain, cotton, and tobacco, which take a large amount of nitrogen from the soil. Where these crops have been raised for a succession of years, the nitrogen soon becomes depleted, and this results in a marked falling off of the productivity of a given area. There is one class of plants, the *Leguminosæ*, including clover, alfalfa, peas, and beans, the raising of which restores the nitrogen elements to the soil. These plants are able to use free nitrogen of the air, and when they are grown and turned

under the soil, it replenishes the supply of this element in the soil. It is in this way that the rotation of crops adds to the fertility of the soil. Lands that have become worn out through the raising of the same crop year after year are again made fertile by changing to other crops which make different demands on the soil. The productivity of various areas has been materially increased through the scientific rotation of crops. Another way of replenishing the nitrogen in the soil is through the use of fertilizers. The importance of this is being recognized more and more, and the productivity is being increased through the application of such fertilizers as will restore the necessary elements.

Potassium is taken from the soil by the crops, but there is such an adequate supply of this element that the problem of its conservation is not very important. Phosphorus is such a vital element in our food supply, and is so essential to the fertility of any area, that President Van Hise speaks of it as "incomparably of greater importance to us than all of our gold, silver, copper, lead, and zinc." He also says that the conservation of our phosphates is "the most crucial, the most far reaching with reference to the future of this nation, of any of the problems of conservation." It has been demonstrated that fields which have been cropped for a number of years do not contain more than from a third to a sixth of their original amount of phosphorus. By the using of raw phosphates on such lands, their productivity is materially increased. All of the products raised on the farms draw more or less upon the supply of phosphorus. It is stated that this loss in tobacco farming is twelve times as great as that in grain farming. Several suggestions have been made, looking toward the elimination of wastes and the restoring of phosphates to the soil. Great amounts are wasted in the mining of phosphates, much of the lower grade material being disregarded, and handled in such a way as to make its recovery difficult. There are also great wastes through not

conserving the fertilizers on the farms. A very large amount of fertilizer is simply allowed to wash away, instead of being restored to the land. The failure to utilize the sewage of the cities as fertilizer accounts for a great loss of phosphates. The amount of phosphorus lost through our careless methods of sewage disposal is said to be the equivalent of nearly one and a quarter million tons of high-grade phosphate rock. Because of the great value of the phosphates, it is recommended that the public phosphate lands should be retained by the government, and that the exportation of phosphates should be carefully controlled, if not prohibited.

Drainage of marsh lands.[43]—We have spoken of the great areas being brought under cultivation through irrigation. It is also possible to increase the amount of tillable lands through the drainage of swamps and marshes. There are in the United States about seventy-seven million acres of swamp land which may be drained. This is an area approximately equal to that of the United Kingdom (England, Scotland, Ireland, and Wales), or about equal to the three states, Ohio, Indiana, and Pennsylvania. This land, when drained, would be worth at least $60 an acre. Estimating the present value of this land at $8 an acre, and the cost of draining at $5 an acre, this would mean an increased valuation of the present swamp land of nearly $3,000,000,000. A low estimate of the value of the annual crop that could be produced on this land is $770,000,000. This area is about ten times that of Holland. If these lands were to support a population of the same density as Holland, they would maintain fifty million people. A further gain through the drainage of wet lands, would be the improvement of health in these vicinities. The present loss due to malaria in the United States is not less than $100,000,000 per annum. With the drainage of swamps and marshes this would be almost eliminated.

QUESTIONS

1. How do you account for our indifference regarding conservation?
2. Tell about the depletion of our forests.
3. Tell about conservation in Germany.
4. What legislation has been passed looking to the conservation of our forests?
5. What are some of the activities of our forestry service? About how much is being expended on our national forests?
6. What are the several ways in which wastes may be lessened? Tell about each.
7. What is said regarding national *versus* state control? The conservation of our water supply?
8. Tell about the conservation of water power. Why is public control necessary?
9. How many miles of navigable rivers are there in the United States? What are the advantages resulting from the development of the waterways?
10. What possible savings are suggested?
11. Tell about irrigation in the United States.
12. What are some of the principal losses in irrigation?
13. What is said of our mineral wealth? What are the four great mineral fuels?
14. What is said of our coal supply? What are some of the principal wastes? How may our coal be further conserved?
15. What is said of our supply of petroleum? Of its conservation?
16. What are some of our principal losses in metals? What should be done to guard against these losses?
17. Tell of our carelessness in the granting of public lands.
18. What is said regarding farm lands?
19. What are the two principal causes of the deterioration of the soil? Tell about each. How may these losses be prevented?
20. Tell about the drainage of marsh lands.

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CHAPTER XVI

CONSERVATION OF PLANT AND ANIMAL LIFE

I. Introduction.
   1. Consumer's point of view.
   2. Producer's point of view.
   3. Recent realization of its importance.

II. Losses from animal diseases.
   1. Cattle.
   2. Sheep.
   3. Hogs.
   4. Efficient control.

III. Losses in plants.
   1. Due to insect pests.
   2. Due to plant diseases.
   3. Due to depredations of animals.

IV. Decreasing amount of wild game.
   1. Examples.
   2. Reasons.
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V. Other savings and factors in increased production.
   1. Warnings of flood and frost.
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   3. The work of state and federal experiment stations.
   4. Disseminating of information.
   5. Possibilities of increased production.

VI. Conclusion.

Introduction. — *Consumer's viewpoint.* — When we stop to consider that the average workingman spends approximately one half of his entire income for food, and about a sixth of his income for clothing, we can appreciate how anything that affects the supply of food products, or the supply of raw material which goes into his clothing, will affect his whole standard of living. Anything that affects the meat

supply of the country, the fruits, the grains, or the vegetables, will affect the prices of those commodities upon which we are dependent for our daily living. Likewise anything affecting the quantity of cotton produced, or the amount of wool, will have a direct effect upon the price that we have to pay for clothing. Our population is increasing very rapidly. We no longer have natural resources in such great quantities that they may be had merely for the asking. This means that greater effort must be expended in increasing the amount that can be produced on a given area. We must also give consideration to the fullest utilization of what is produced.

Producer's viewpoint. — From the standpoint of the producer, this is a most important problem, as approximately one third of all those engaged in gainful occupations in the United States are engaged in agriculture, forestry, and animal husbandry,[1] and anything which affects the amounts that they can produce in these industries will immediately affect their income. Conservation of plant and animal life thus has a twofold function, to benefit the consumer through increasing the amount which he can purchase for a given sum of money, and to benefit the producer through increasing the returns for his effort.

Recent realization of its importance. — In the last chapter we considered the enormous wastes due to our careless and indifferent use of the great natural resources of the country. We have been quite as careless and indifferent in regard to the wastes of plant and animal life. We have stood by blindly and allowed certain pests, certain blights, to gain such a foothold in the country as almost to wipe out some of our greatest wealth-producing industries. It is only within the last two decades that we have begun to realize the possibilities of the saving of millions of dollars to the people of the country through the expenditure of thousands. Throughout the past twenty years, many investigations have been made regarding the causes of the different losses, and methods and

processes have been discovered, the application of which will mean an enormously increased production, and consequent consumption, throughout the United States.

One reason for our failure to appreciate these losses has been our indifference to small items, our lack of appreciation of the enormous aggregates which may result from many small savings. We are not wont to think of the economic importance of an egg, yet the estimated value of the poultry industry for 1917 in the United States was $1,000,000,000.[2] This nearly equaled the total value of the wheat crop, or would have paid for the entire cost of our public schools with nearly a hundred million dollars to spare. There are great preventable losses in quality and value in the poultry business. The producer loses when he must sell at a lower price because of spoilage or poor quality, resulting from careless methods in handling; and the consumer loses because of the lessened supply and consequent higher prices. These losses are estimated by the Department of Agriculture at a hundred and twenty million dollars a year,[3] an amount nearly equal to the total value of the gold and silver produced in a year in the United States.

Losses from animal diseases. — The United States is still an agricultural country. The total value of its farm products for 1918 ($21,386,000,000)[4] was more than ten times the value of all the iron, copper, lead, zinc, gold, silver, and all other metals mined in the country. About one third of this wealth is in the animal products from the farm, and about two thirds is in the crops raised. Anything which affects the health of any of our domestic animals will seriously affect the economic life of the whole country.

From earliest times, we have had accounts of great scourges that afflicted the domestic animals as well as of those which attacked human beings. Ever since biblical times, successive scourges of locusts or grasshoppers have caused the devastation of great areas. Formerly these were looked upon

as afflictions sent by Providence which were only to be endured. Now we look upon the same things as nuisances which with sufficient effort may be eliminated.

Practically all of our domestic animals have been subject to various diseases from time to time. The diseases which have affected the cattle industry have been perhaps the most important from an economic standpoint, because of the great value of the dairy and meat products of the country, because of our dependence upon these products for our food supply, and because of the dangers of transmission of certain of these diseases to human beings.

Cattle. — Of these diseases, bovine tuberculosis is the most widespread, and is perhaps most familiar to us because of the recent agitation to require a test of all herds which furnish the milk supply for our different communities. In 1907, the Bureau of Animal Industry first undertook actively to coöperate with state and city officials and with individual herd owners in the eradication of this disease from dairy herds. Many animals were tested, herds often showing as high as 17 or 18 per cent afflicted with tuberculosis. Realizing the menace to health from the use of milk from such animals, many cities passed ordinances permitting milk to be sold from inspected herds only. Many states passed laws requiring the testing of herds, providing for the condemnation of those animals afflicted, and for reimbursing the owners. As a result of these repressive measures, the number of animals affected has been reduced in these sections from 17 and 18 per cent, to from 1 to 3 per cent, and it is believed that the disease can be entirely eliminated.[5]

Another disease which threatened to wipe out the entire cattle industry of the West and South is the Texas fever. This disease, beginning in the South, extended over successive areas until nearly a fourth of the total area of the United States was infected. This infected area was first located by the Department of Agriculture between the years

1882 and 1885, and then was quarantined in order to prevent the spread of the disease. In 1890, the discovery was made by some of the scientists in the Bureau of Animal Industry, that the tick was the carrier and disseminator of Texas fever. Throughout this infected region a large number of cattle have died, while all of the infected animals have had an arrested growth, with an accompanying loss in beef and milk production.[6] There have also been great losses through the decreased value of Southern cattle in the markets, and through the quarantine which prevented the selling or exhibiting of the cattle outside this area. These total losses are estimated at from sixty to a hundred million dollars a year.[7]

It was not until 1906 that a systematic effort to eradicate these ticks was made by the Federal government, in coöperation with the several state governments. Then it was discovered that it was a comparatively simple matter to rid a herd of these pests by dipping or spraying the animals with an arsenical solution and by care in the rotation of pastures. It was found that this could be done at an average cost of not more than fifty cents a head, while the average value of the cattle thus freed was increased $9.76 a head.[8] As a result of this systematic effort, about four hundred thousand square miles, or more than a half of the entire infected area, has been freed from the tick and released from quarantine.[9] The eradication of this disease is regenerating agricultural conditions throughout the South. It not only prevents the losses due to the tick, but opens up an unrestricted market for cattle, thus enabling the stock growers to obtain better prices. Good breeding stock can now be brought in without danger of loss, thus promoting the cattle raising and dairy industries.[7] This makes possible diversified farming, increases the fertility of the soil, and improves agricultural conditions generally. The enormous gain resulting from freeing this territory from this disease

has been achieved at a cost to the Federal government of less than ten dollars to the square mile or about a cent and a half an acre.[9]

Another great loss in the cattle industry was due to black leg. In infected regions, this disease caused losses of 10 per cent of all the calves. European investigators discovered a protective vaccine. Within the past fifteen years, some seventeen million doses of this vaccine have been distributed among the stock raisers. As a result of its use, the losses have been reduced to less than one half of one per cent of the vaccinated cattle.[10]

Sheep. — A few years ago, many wool growers were predicting that the sheep industry of this country would soon come to an end, owing to the spread of sheep scabies. This disease caused a heavy loss in the product of wool and mutton each year, and it became so prevalent throughout the West, that, in 1904, a federal quarantine was placed on a district including over half of the total area of the United States. The Department of Agriculture, in coöperation with the several states, provided for the inspection of all sheep, and the proper treatment of all found to be infected with, or exposed to, this disease. The plan was very effectual, and the disease was completely eradicated from large areas which were then released from quarantine. New Mexico affords an example of what may be done as the result of state and federal cooperation in the eradicating of such a disease. In this state in 1907, there were about four and a half million sheep, nearly one half (48 per cent) of which were diseased. As a result of the annual dipping, under federal supervision, of all sheep in the state, inspection of sheep in the spring of 1912 showed the existence of less than 1 per cent of disease. Thus, by systematic effort, and at a comparatively slight cost, this disease with its heavy loss in the products of wool and mutton each year, has been practically eliminated from the United States.[11]

Hogs. — Those who live in the Middle West will recall with what alarm the farmers of these regions learned that hog cholera had broken out in their neighborhood. When this disease once got a foothold, it swept across great areas, costing many farmers their entire droves. It became so serious that many farmers gave up attempting to raise hogs, and were thus cut off from an important source of their farm revenues. It is estimated that in 1918 the loss from this disease amounted to more than $32,000,000,[12] besides materially affecting the meat supply of the country. In 1903, after several years of investigations, the micro-organism that caused this fatal disease was discovered. After the discovery of the cause, a study of the problem of prevention was taken up, resulting in the discovery of a protective serum. This serum can be produced at a comparatively low cost, and its use has given most satisfactory results. Some twenty-eight states are coöperating with the Federal government in supplying this serum, and thus the disease is being brought well under control. The economic gain through the wiping out of such a fatal disease as this may be appreciated when we consider that the value of property in swine in the United States exceeds $500,000,000.[12] The South Dakota Experiment Station showed that 90 per cent of all animals treated with this serum safely withstood disease.[13] With the elimination of hog cholera, farmers will be able to raise greatly increased numbers of hogs, without being deterred, as they have been, by the fear of this destructive disease. This will mean a better utilization of the corn crop, more diversified farming with all of its advantages, larger revenue to the farmer, and an increased meat supply for all the people.

Efficient control. — The dreaded foot and mouth disease of foreign origin has broken out twice within this country, but through strict quarantine, careful inspection, the slaughter of all diseased and exposed animals, and the disinfection of

premises it has been promptly eradicated after a few months of vigorous effort, through the coöperation of federal and state authorities. Had it not been for a capable, well-trained, and thoroughly organized force, ready to attack this disease " with the energy and promptness of a city fire department," this infection would in all probability " have extended to the great cattle-raising regions of the West where it would have caused tremendous damage, and where its eradication would have been much more difficult if not impossible." [14]

Many other diseases have also obtained a foothold in this country. Some of them have been brought in through the importation of stock from foreign countries. Certain ones have attacked horses, causing great losses in particular localities, but as the result of strict quarantine measures, together with proper treatment of the diseases, they have been brought under control, and in many cases completely eradicated.

Losses in plants. — *Insect pests as the cause.* — No one has ever attempted to run a farm or even to have a small garden without becoming conscious of the many pests against which he must contend, in order to secure a full crop. No grain, fruit, or vegetable seems to be free from these pests, and, unless they are subdued, the entire crop may be lost. It is estimated that the ravages of plant diseases and insects cause an annual loss to the farmers of about 20 per cent of their crops, or about a billion dollars.[15] This means a yearly loss equivalent to more than ten dollars apiece for every man, woman, and child in the country. As a result of investigations, methods of controlling some of the worst of these pests have been found, and our Department of Agriculture says that probably one third of this enormous sum could be saved by the proper application of insecticides and fungicides.[1]

About 1892 the cotton grown in the southern part of Texas, near Brownsville, was found to be infested with a

weevil which burrowed into and destroyed the boll of the cotton plant. Because due precautionary measures were not taken against the pest, it continued to spread over wide areas, extending its ravages each year over a new radius of some fifty miles. Within ten years, it had reached Louisiana. By 1905 it had gotten into Oklahoma and Arkansas, by 1907 into Mississippi, and by 1910 into Alabama. It has since reached Tennessee and Georgia, and has extended some miles into Florida. For the past ten years, about twenty seven thousand square miles have been added each year to the infested area, until now an area of nearly three hundred thousand square miles is suffering from the depredations of the boll weevil. In some sections this has caused a total loss of the cotton crop, and for the infested region there has been a falling off of the crop of about 50 per cent. Some years the losses from this one pest have been estimated to exceed $50,000,000. The United States appropriates about $250,000 a year to fight this pest, and individual states are likewise appropriating large sums. As the result of their combined attack, the boll weevil injury has been greatly lessened. New cultural methods have been introduced, varieties of cotton more resistant to certain diseases are being grown, and farmers' demonstration work is being carried on throughout these infested regions. Thus, by the application of scientific methods, the yield of cotton on these demonstration farms has been more than 75 per cent greater than that for the entire states.[16]

Of the insects injurious to fruits, the codling moth is said to cause greater loss to apples and pears than all other insects combined. The loss that this insect causes to the apple orchards of our country is said to be not less than $15,000,000.[17] In many sections of the country, where orchards once flourished, farmers have given up all attempts to raise apples and pears. In some areas, where no preventive meas-

ures were taken, this insect caused a total loss of the fruit, and a few years ago it was estimated that from a fourth to a half of the apple crop of the United States was either totally ruined or materially injured by it. Experts of the Bureau of Entomology began to look for remedial measures in order to protect our fruit from the depredations of this moth, and certain birds were found to be the most natural enemies of the pest. An efficient system of spraying the trees was discovered, at a cost of not more than from one to three cents a tree. As a result of the careful following out of the suggested measures, many orchards were restored to their former capacity, and the apple growers, even in the badly infested regions, are saving from 85 to 98 per cent of their fruit each year.[18]

New England has greatly suffered for the past twenty-five years from the devastation of the gypsy moth. In some sections the shade and fruit trees were completely despoiled of their leaves. This led to a marked depreciation of property values in infested towns, in addition to the loss of fruit, and the disagreeableness of such a pest as this.[19] About the same time the Western states were suffering enormous losses from the San José scale which particularly attacked the citrus orchards.[20] Other fruits have suffered from similar pests; the various grains and many of the vegetables have likewise been attacked by certain insect pests. These have all caused enormous losses, and in some sections have been so serious as to cause the farmer to abandon the attempt to raise certain crops. In most cases, however, a careful study of the pest has led to the discovery of methods by which its ravages may be ehecked, if not completely eliminated.

Losses due to plant diseases. — It is probable that quite as great losses have resulted from the attacks of grain, fruit, and vegetable diseases, as have resulted from the depredations of insects. One of the most serious of these diseases

was that of pear blight. The effective control of this disease has been accomplished and has resulted in the saving of millions of dollars to pear growers on the Pacific coast and in other parts of the country.[21] Other diseases have attacked the potato, the egg plant, the tomato, the peach, the grape, the cotton and tobacco plants, the cranberries, asparagus, and sugar beets. Each of these diseases has caused great loss to the fruit grower, the farmer, and the truck gardener. Often, however, simple but efficient measures have been found by which they could be checked, and in some cases completely eradicated. A good illustration of the economic gain to a state resulting from the control of one of these diseases is afforded by Wisconsin. A few years ago the oat crop suffered great losses because of smut. The University found a way of reducing this loss from 20 per cent to one half of 1 per cent. This resulted in a saving to the state on this one crop of about four and a half million dollars yearly.[22]

Losses due to depredations of animals. — Another serious loss to growing crops is that resulting from the depredations of such animals as wolves, coyotes, moles, field mice, rabbits, ground squirrels, and prairie dogs. A number of the Rocky Mountain and other Western states are infested by these pests. Some of the colonies occupy many thousands of acres, and aggregate millions of rodents. It is considered that thirty-two prairie dogs will eat as much forage as one sheep, and two hundred and fifty prairie dogs as much as a cow.[23] Consequently, such vast numbers of them as are found on the western prairies do an immense damage to forage and other farm crops. These destructive rodents have caused such enormous annual losses (estimated at about $500,000,000) throughout the grazing and farming regions [24] that the Biological Survey has been conducting experiments with poisoned bait, traps, and other methods looking forward to their extermination. The meadow mice, which ordinarily

are of little importance, increased inordinately in certain sections of Nevada in 1908, and, before they could be checked, destroyed thousands of dollars' worth of alfalfa. We ordinarily think of the crawfish as an entirely harmless little animal, yet, in a wide stretch of country in Mississippi and Alabama estimated at not less than a thousand square miles, these crawfish to a very considerable extent prevent the successful production of cotton and corn.[25] It is said that large fields of young cotton have been destroyed in a single night. The great losses resulting from the depredations of these different animals, together with the fact that such dread diseases as the bubonic plague and spotted fever are spread by some of them, *e.g.* rats and ground squirrels, have led to determined efforts toward their extermination.[23]

Decreasing amount of wild game. — We have all heard our grandfathers tell of the abundance of wild game throughout the United States. In the early days, this was one of the important sources of the food supply, but, as with our other resources, no thought was given to the future, and great numbers of wild birds, as well as of fur-bearing and meat-producing wild animals, were most ruthlessly destroyed.

Examples. — The wild turkey, which furnished the colonists with an unfailing supply of food, is now found only in scattered sections of the South. The wild pigeons, quail, prairie chickens, and various species of grouse, which were once so plentiful, have entirely disappeared from many parts of the United States, and are found in greatly reduced numbers in other parts. The buffalo, which formerly roamed the United States in such numbers from central New York to Oregon, have had a most tragic history. The last of these east of the Alleghanies had been killed by 1730; east of the Mississippi by about 1812. By 1870 those left were confined to two great herds, one of which roamed the plains from southern Nebraska to Colorado and Texas, while the

other ranged from Dakota to Montana and Wyoming. In 1897, not a buffalo was left in the United States except a few in captivity.[26] The antelope, elk, moose, and deer have likewise been driven from one section after another until now they are found within comparatively limited areas.

The destruction of the fur-bearing animals has been quite as great. The securing of the pelts of the mink, the otter, the fox, the marten, and the muskrat has become increasingly difficult, until now many of these animals are reared in captivity, or on preserves under control of breeders. It is said that muskrat farming has become such a prosperous business on the eastern shore of Maryland, that the muskrat marshes, measured by actual income from them, are worth more than cultivated farms in the same vicinity.[27]

The story of the fur seal of the Pribilof Islands furnishes another striking example of the reckless and needless waste of a most valuable natural resource. About 90 per cent of all the fur seal skins in the world have been taken from this small group of four islands in the Bering Sea. Through political maneuvering, a commercial company secured extended privileges and began systematic exploitation of the islands. Before the people of the United States became aroused to the situation, these most valuable fur-bearing animals had become almost exterminated, the estimated number of seals having decreased from five million to about one hundred thousand. Since 1911, the United States government has refused to farm out these islands, and, under its protection, the herds are now rapidly increasing. Through a little care and foresight, the extermination has been checked, and it is thought that this industry will soon net the government over a million dollars annually.[28]

Three reasons may be given for the great decrease in the game of the country.[29] (1) The reckless destroying of all kinds of wild game by the early colonists. "We find them selecting haunches of venison and leaving the rest of the car-

cass to the dogs and beasts of prey; giving wild geese to their dogs; and burning cane-breaks, thus destroying the haunts of many game animals and birds merely to secure a day's kill. . . . Late in the last century numbers of slain buffalo were left to rot after their tongues had been cut out."

(2) As the population increased, the destruction of game for commercial purposes became a more important factor. Meadow and forest were depleted of game, and the streams were depleted of fish in the haste for big profits.

(3) The conversion of wild into cultivated lands. "Forests have given away to plowed fields, meadows have been tilled, and swamps have been drained. These places, when wild, furnish suitable homes for game animals and birds, and their occupancy by man has permanently reduced the stock of game by depriving it of available shelter."

Legislative restrictions. — In many of the European countries wild game furnishes an important item of the food supply. Hunting and fishing privileges are an important source of government revenues. Wild fish and game may be made an important economic factor in the life of the people through the utilization of forest and stream. As our wild game began to disappear, we came to recognize this, and the several states tardily passed restrictive laws. Methods of hunting and of fishing have been restricted. Hunting or fishing in the season of reproduction has been prohibited. The amount killed or captured within a given time has been limited. All hunting of certain species has been prohibited for a term of years. Hunting and fishing licenses are now required by many of the states. Fish and game preserves are set aside by the Federal and state governments. Game birds have been introduced from other countries, and are being protected for a season of years. The government has established some fifty-six national bird reservations, and has prescribed a perpetual closed season for all insectivorous birds.[30] State fish hatcheries have been

established for replenishing the streams. In these various ways we are attempting not only to prevent the extinction of game birds, animals, and fish, but also, in the case of many species, to replenish the supply.

Other savings and factors in increased production. — In many ways is the government trying to aid us in lessening waste and in increasing production.

Warnings of flood and frost. — Through the Weather Bureau, warnings of frost are sent to the cranberry marshes and to the fruit-raising districts. It is estimated that by such timely warnings, at least $20,000,000 was saved in the one year, 1912. In this same year, the Bureau gave flood warnings which resulted in a saving of some $16,000,000 worth of property.[31]

New species of grains and fruits introduced.[32] — The Agricultural Department has sent explorers to the most remote sections of the world, in the search for fruits and grains that would add to our agricultural wealth. The introduction of the short-kerneled rice, of Swedish barleys, of drought-resistant durum wheat, and of Swedish oats has greatly augmented the grain production in the different sections. The introduction of Sudan grass, of African Rhodes grass, of the soy bean, and of Siberian and Peruvian alfalfas has greatly increased the forage crops for nearly all parts of the country. The bringing in of the seedless grapes from Italy and Greece, of the Smyrna fig, of the Mexican avocados, of the Chinese wild peach, jujube and persimmon, the pistachio nut, and the oriental mango has given us valuable additions to the nut and fruit industry. Many of these varieties are proving much hardier than the local varieties, are better able to withstand drought and extremes of temperature, and not only yield greater returns, but are also found to be available for lands which were formerly thought to be unfit for cultivation.

The work of experiment stations. — In the many state and

federal experiment stations, new methods are being worked out by which the crop production may be materially increased. At one station, a corn was developed yielding an average of twelve bushels more per acre than other varieties; a barley yielding five bushels more per acre; a new variety of oats producing nine bushels more per acre than common varieties.[22] Another station established, as the result of some twenty years' experimenting, the advantages of potato spraying, showing an average increase in yield of 64 per cent in favor of spraying.[33] Many other extremely valuable suggestions have come from these experiment stations.

Dissemination of information. — One of the most essential things for increased production is the disseminating of information in regard to the methods and possibilities of increased production. Perhaps the greatest need of the present is to utilize the information that has already been made available by our scientists. It has been hard to arouse the people out of their indifference in regard to these wastes, and to bring them to a realization of the enormous savings that could be made with a little care and attention. However, a remarkable awakening is taking place just at the present time. A new interest is being shown in conservation and in all phases of agricultural life. Farmers' clubs are being organized all over the country. In 1913, over sixty thousand boys and girls were systematically organized into boys' corn clubs, girls' canning clubs, potato clubs, vegetable garden clubs, and so forth.[34] Experiment farms have been located in many sections, and demonstration work has shown the possibilities of crop increase. The farmers' institutes and the mass of printed material sent out by the Department of Agriculture are great factors in spreading information on agricultural subjects. The remarkable growth in the number of colleges and universities offering advanced and research work in agriculture in the past four or five years, and the very great increase in the number of secondary

schools now giving instruction in agriculture, bring scientific knowledge concerning these matters within the reach of the mass of the people.

Possibilities of increased production. — What may be accomplished through such work is well illustrated by the recent reports from some 1500 farmers' corn clubs. The average yield per acre of all the corn club members reporting was 74½ bushels, and 426 members averaged a hundred bushels or more per acre, while the average yield for the whole United States was only 29.2 bushels.[34] The importance of this difference in yield may be realized, when we consider that the older European countries of Germany and the United Kingdom, through their more scientific methods of crop rotation and fertilization, are averaging 35 and 32 bushels of wheat, respectively, per acre, as compared with our 15 bushels per acre; 61 and 45 bushels of oats, respectively, as compared with our 29 bushels; 41 and 35 bushels of barley, respectively, as compared with our 24 bushels. A still greater variation is found in the yield of potatoes. The average yield in Germany for the last ten years was 196 bushels per acre; in the United Kingdom 202 bushels; while in the United States the yield was but 96 bushels.[35]

Conclusion. — We have considered some of the economic losses which have resulted from the reckless waste of our natural resources, the wastes due to the destruction of plant and animal life, as well as some of the methods by which, after being aroused to the situation, we have been able to check these wastes. We have seen some of the possibilities whereby, through consistent effort, we can add to the amount produced within the country. The prejudice with which the farmer formerly received suggestions from the government, resenting the interference with his customary methods, even to the extent of attempting to blow up the dipping tanks with dynamite, and of driving off the government agents with loaded guns,[36] has given way to an appreciation

of what the government is doing and can do in furthering his interests. As a result, we are beginning to have a splendid spirit of coöperation between the farmer and the Department of Agriculture; and not only the farmer, but all classes are looking to the men of science, are appreciating their suggestions, and, as a result, are very materially adding to the country's annual production. In this way, through the elimination of unnecessary wastes, through the new industries opened up, and through the increased production per unit of area, the producer is very materially benefited through the increased returns which he gets for his labor, and the consumer, through the increase in the amount of goods available for consumption.

QUESTIONS

1. From what two view points may we consider the conservation of plant and animal life? Explain each.
2. How is our indifference accounted for?
3. What are some of the principal diseases which have affected our cattle industry? Tell about the losses from each and what has been done to prevent these losses.
4. Tell about the losses in the sheep industry and the success in eliminating these losses.
5. Tell about the losses from hog cholera. What has been done to check this disease?
6. Why is efficient control of these diseases important?
7. What is the estimated annual loss to the farmers due to the ravages of plant diseases and insects? Give an account of the struggle against the cotton-boll weevil.
8. Tell of the depredations of the codling moth. Of the gypsy moth.
9. What are some of the principal losses due to plant diseases?
10. Tell about the losses due to the depredations of animals.
11. Tell about the decreasing amount of wild game.
12. What reasons are given for the great decrease in the game of the country?
13. How are we attempting to check this decrease?
14. Give an example of the savings through warnings of flood and frost.

15. What are some of the new species of grains and fruits that have been introduced recently?
16. Tell of the work of the experiment stations.
17. Tell about the importance and the methods of disseminating information in regard to the possibilities of increased production.
18. What is said about the possibilities of increased production?
19. Summarize the conclusion to this chapter.

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SUPPLEMENTARY READINGS

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Bulletins and Special Reports of the United States Department of Agriculture.

CHAPTER XVII

CONSERVATION OF HUMAN LIFE

I. Safety.
   1. General significance.
   2. National organization for safety.
   3. First-aid work.
   4. Railroad organizations for safety.
   5. Safety in mines.
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   c. Coöperation of the people.
   d. Eugenics.
   e. Pure food.

V. Conclusion.

Safety. — It is only when we hear of some great accident or disaster, such as the sinking of the *Empress of Ireland*, the *Titanic*, or the *Eastland*, or the Triangle Shirtwaist fire, that we awake to the enormity of the sacrifice of human life in our country. We do not realize what a tremendous offering of lives is taken every day and every hour, the tolls that a country pays from among its citizens for its greed, its hurry, and its indifference. According to the report of the Commissioner of Labor, there are thirty-five thousand workmen killed and two million workmen injured in industrial accidents every year. In other words, there is one death every sixteen minutes of every day, and one injury every sixteen seconds to the workmen in our American industries.[1] A conservative estimate of the economic loss in this country due to industrial accidents places this loss at more than a quarter of a billion dollars each year, or "more than two million workmen could earn in a twelve-month, at four dollars a day apiece." It is further estimated that at least half of these accidents might be avoided. This would mean "a saving in the United States, each year, of about twenty thousand lives; the prevention, each year, of a full million of bodily injuries of varying degrees; and the money saving of $125,000,000 annually." [1] Such figures as these make it plain that the question of safety is an important one when dealing with the conservation of the greatest of our resources, human life.

General significance. — Dr. Edward Steiner, who has investigated conditions among the working people, says, "A

nation recovers from the effects of war when there are decades of peace, but when that war is without end, when we kill, and maim ceaselessly, we may never recover. The nation's asset is its working strength, no more its fighting strength. We must guard our nation's first asset, the life and limb of labor." [2] Accident conditions grew so bad, that several years ago, a country-wide movement was started to remedy them in so far as was possible. This new crusade for "safety first" is characterized by Graham Taylor [3] as one of the wonders of the modern world. Usually the agitation starts following some big accident. Such agitation has recently stirred both legislators and employers to action, and the coöperation of these with safety experts is one of the most promising movements of the present day.

National organization. — There has been a National Council of Industrial Safety organized, with headquarters in New York City, which serves as a general clearing house for suggestions in regard to safety methods and appliances. One authority has said that the White Cross, the national organization for the safety of industrial workers, promises to be an even greater rescuer of life and limb from constant peril than the Red Cross Society can be at occasional national disasters.[3]

First-aid work. — We must not ignore the work of the Red Cross,[4] however, for besides their ministry at the time of accidents, they have taken up the more fundamental work expressed by their watchword, "The prevention of accidents and the prevention of infection." This organization is doing constructive safety work by giving what they call first-aid instruction. This consists in instructing the workmen regarding the dangers of their work, the special precautions necessary for them to take, and the "first aid to the injured" principles which have saved many lives. One mining corporation reports that before the introduction of first-aid, one fatal accident occurred to every ninety thou-

sand tons of coal mined. One year after this introduction, there was one fatal accident to one hundred and fifty thousand tons of coal mined; and three years afterward, there was only one fatal accident to every two hundred and forty thousand tons. Statistics from other countries verify these possibilities in accident prevention, and speak for the efficiency of this organization.

Railroad organizations for safety. — Mr. Ralph E. Richards started the movement for safety among railroaders, in his capacity as Chairman of the Central Safety Committee of the Northwestern road, and his work may be taken as typical of the most advanced work for "safety first." By a practical and suggestive campaign, this company, during the first twenty months of its campaign, succeeded in reducing the number of employees killed by 29 per cent; the number of employees injured by 31 per cent; the number of passengers killed by 36 per cent; and the number of passengers injured by 16 per cent.[5] This is the result of less than two years' work, but a material decrease in accidents is shown. From 1910 to 1912, forty-seven other railroads started to use these same safety methods, which means that over one hundred and forty-four thousand miles of road are now attempting to work out this problem.[6] The golden rule of the railroads must be, "It is better to cause delay than to cause an accident." As an illustration of the laxity of our law enforcement we have these figures: during the last ten years in the United States, 50,025 trespassers were killed, 53,427 were injured; while in Great Britain, notwithstanding their denser population, only 4435 trespassers were killed and 1319 injured.[7]

Mr. Richards found, in his study of the problem, that it was not alone through the use of mechanical devices for safety that the loss of life on the railroads could be stopped, but that the active coöperation and assistance of the men who are being injured must be gained, before any plan for

the prevention of accidents can be a success. Many accidents are directly traceable to the negligence and indifference of the high official, but of those due to the workmen about one half are said to be due to ignorance and one half to carelessness. This expert outlined and has followed this plan, in his campaign against ignorance and carelessness on the part of the workmen:[8]

(1) Inspection of different shops and trains by inspectors, foremen, and committees of workmen on full pay. Men from one department are often able to see defects in another department when they are unable to see them in their own.

(2) Careful instruction of the workmen in regard to the dangers of their occupation.

(3) Proper supervision of the men engaged in dangerous work.

(4) Discipline of the men who refuse to coöperate in promoting safety.

(5) Boosters' meetings, with committees of workmen on specific problems.

(6) Caps, buttons, and other insignia displaying the "Safety First" sign, and bulletins notifying employees of the progress in the safety movement, calling their attention to recent accidents, their causes, and the ways to prevent them.

There is much work involved in the carrying out of this plan, but it means to the employer increased efficiency, and to the men, increased safety. The results are summed up by Mr. Richards:[9] "Does it mean a saving to any railroad to have in twenty months 152 fewer death claims, and 4845 fewer injury claims to settle than it had the preceding twenty months? It pays in dollars and cents as well as from a humanitarian point of view."

Of the thirty five thousand accidental deaths and two million injuries which the Bureau of Labor estimates occur each year, about ten thousand deaths and two hundred thou-

sand injuries can be directly traced to the railroads.[10] Over half of the injuries are due to accidents in shops, not involving the operation of trains. Even when employers and employees are consciously working for safety, there are still many chances for human error. One of the big problems for railroads as well as other industries is, then, the reducing of the chance for human error to a minimum. Automatic control will come, for the operation of trains, but meanwhile workmen must be selected and educated in their work. Rules have too often been makeshifts. They must be carefully made and strictly obeyed if we would reduce this chance for human error consistently. The railroad magnates must be awakened to this trend of the times toward safety, by public sentiment, or by law.

Safety in the mines. — The problem of safety in the mines has to do almost exclusively with the people in that one industry. For the past several years, nearly three thousand men have been killed annually in the coal mines of the United States. Of these only 15 per cent are killed in the great disasters that come to our notice, and 50 per cent are killed in minor accidents, just one or two at a time, and the incidents are passed by without notice.[11] In 1907, the number killed was 4.8 to every thousand employed in the coal mines of the United States. In that same year the rate in Germany was 2.5, in France 1.1, and in the United Kingdom 1.3. Since then we have reduced the rate here to 3.5, but we are still far behind other countries.[12] In a study of conditions in the coal mines of our country, Dr. Joseph A. Holmes, late Director of the Bureau of Mines, finds that of the seven hundred and fifty thousand people working in the coal mines, less than 50 per cent speak any English at all, and 75 per cent know almost nothing about our laws and customs.[11] Safety goes back to living conditions. He suggests that the solution of the accident problem in the mines is to Americanize and educate the miners.

Certain specific measures have been found helpful in dealing with the problem. The first-aid training has already been mentioned. The Federal Bureau of Mines has in operation six mine safety stations, and seven mine safety cars, scattered among the mining districts. Permanent safety committees have been organized among the miners themselves, and campaigns for safety propagation conform quite strictly to the plan quoted above in connection with the railroads. Inspection is being increased, and inspectors must be impartial investigators, while at the same time they must be equipped to give expert constructive advice.

One coal and iron company has established a rigid system of timbering, requiring timbers set at four-foot intervals, to eliminate the numerous petty accidents caused by the falling of roofs. If one hundred be taken as the number of men killed per million tons mined in 1908, this reduced the number in 1909 to 76.7, and in 1911 to 45.8. This is a reduction of 54 per cent during these years, and is a good example of the results of a little preventive care.[13] Attempts are being made to compel the use of permissible, or tested, explosives in place of the old black powder and dynamite formerly used in blasting. Electric shot firing is very strongly advocated, although very few mines have adopted it. Attention is being directed to the shielding of machinery and to the protecting of electric wires. The newer mines are being made in strict accordance with the latest methods of concrete construction. A checking system for the man serves to locate those left in the mine at the time of shot firing or disaster. These improvements are some that have been in use in certain mines, and are strongly recommended for all of them. Some mine owners have not advanced so far in this work as have others, but the reports from the different sections indicate that people are becoming awake to conditions, and that advance will be made in the next two or three years through the legislatures of the

several mining states. The time is ripe for federal legislation which shall follow the lines indicated by the investigations of the Bureau of Mines.

Safety in factories. — The National Association of Manufacturers has taken a great deal of interest in the subject of accident prevention. For four years, it has had a Committee for Accident Prevention and Workmen's Compensation. An estimate of the economic loss in this country through industrial accidents places it at more than a quarter of a billion of dollars each year. The rule of the factory must be, "It is better to be careful than to be crippled." Different manufacturers vary in their estimates of the extent to which industrial accidents can be prevented. However, they are practically agreed that from 50 to 75 per cent of the accidents in factories are avoidable.[14] The great source of accidents is unprotected machinery. Long hours, and the monotony of the work under systems of minute division of labor, resulting in fatigue and carelessness, add to the probability of accidents. Social legislation in the last few years has concerned itself more than ever before with the factory worker, as will be seen in the discussion of state control.

Work of corporations toward safety. — Some of our large corporations have begun to recognize the yearly toll of industry, and have taken measures looking toward reducing the number of deaths and injuries in their particular industries. The steel corporations are among those taking the lead in accident prevention work. An attorney for one steel company says that the keynote of all efforts for the prevention of accident will be "organization." He has made a detailed study of accidents and classifies them as: (1) preventable — those due to the failure of the employer to do his duty, and those due to the ignorance or carelessness of the employee — and (2) unpreventable. The accidents of the first class are the ones we must study and anticipate in

so far as is possible. According to this attorney, the leaven of the safety movement must begin at the top and work down. The foreman is the most important man in the movement. He can secure safety in three ways, by making and enforcing rules, by keeping safety before the men constantly, and by gaining the coöperation of the men. The aids used in the steel industry are the same as in the others, safety buttons and signs, bulletin boards, moving pictures, and lectures.[15]

Injuries to the eyes are especially prevalent in the steel industry. The dangers to the workmen come from the flying chips. To protect a man from the dangers of his own work, the foreman must secure proper goggles for him, and see that they are worn. Screens must be placed between the workmen to protect them from each other's work. During the last half of 1910, 6.5 per cent of the men in the American Steel Foundries had their eyes injured. In the last half of 1912, 1.6 per cent were so injured. By the use of the aforementioned preventive measures, accidents were reduced in two years time 75 per cent.[16]

State control. — Turning from individual action to state action, we find organizations perhaps not so highly developed, and often hampered by politics, but organizations just in the beginning of their growth, giving promise of consistent work in the near future. In Minnesota,[17] the Labor Bureau has been interested in the prevention of accidents for several years. In 1909, an investigation conducted by this department revealed the fact that during the year over ten thousand non-fatal, and three hundred and forty-two fatal, accidents occurred. Increased efforts toward prevention in three years reduced the fatal accidents 50 per cent, the non-fatal 29 per cent. Minnesota is one of the states where the efficiency in prevention work is greatly lessened because of the change of those in charge of the work with the frequent changes in administration. Politicians have had these offices for many

years, and they were not experts, neither were they vitally interested in their work. Experts have been engaged for this work only the last few years, but probably Minnesota now has the next best prevention department to that of Wisconsin.[18]

New Jersey has been concentrating her efforts on a particular phase of prevention work, that of eliminating the loss of life and injuries in fires. This is done by enforcing the use of improved fire apparatus, escapes, extinguishers, fire drills, electric alarms, and by appointing one of the workmen in each factory as fire chief of that factory.[19] The Illinois department of factory inspection is supposed to enforce labor laws, to prevent accidents, and to protect industrial workers. With the limited amount of money, and the few men allowed it for these multiple duties, this state commission is doing a good work, one which is broad and well organized. It serves to illustrate another weakness of most of these state departments. There are too many duties for the men employed, — too much work for one department, which, when well organized, can do little more than keep in touch with the various lines which it ought to dominate.[20] New York, Indiana, Ohio, and Massachusetts are other states which have advanced far enough in this work to deserve mention.

The Wisconsin Commission[21] represents the most advanced method of doing this work, although the method cannot be recommended to every state. They proceed on the theory that when a workman suffers from an accident, the employer must suffer in the way most surely to teach him the care due his employee, which is through his dividend. C. H. Crownhart, Chairman of the Wisconsin Industrial Commission, says, "There is no statute which will efficiently safeguard the worker except such as automatically provides the penalty for the employer for each and every injury received in the work places, as the result of an accident."

This policy has led to an increased effort among manufacturers, for safety; and whereas the factory inspector used to compel safety with a big stick, now the office of the Commission is to point the way to safety, — the employer will do the rest. The coöperation of manufacturers is a necessity for good safety work. The one rule that has been emphasized by the Commission from the beginning is that every order, every rule which is issued, must be based not on theory, but on actual practice. This Industrial Commission has become thoroughly convinced that the plan of working out the problem through experience, and in coöperation with the manufacturers, is the best plan to get results.

The reports of the Safety Congress have been most valuable in presenting statistics of past casualties, and in suggesting ways of preventing many of these casualties in the future. Not more than one third of the reduction in accidents is due to mechanical appliances. Two thirds are due to organization and education.[22] We have found that with industrial accidents playing so great a part in our country's life as they do, conservation, besides being just and humane, pays in dollars and cents.

New standards for the coroner's office. — Before concluding this phase of the subject, it may be well to mention a phase of prevention work which has lately come before the attention of many people.[23] Coroner Peter Hoffman of Chicago found recently that during eight years of service, there had been thirty-eight thousand twenty inquests in Cook County. The number was appalling, and he started a movement for the prevention of those circumstances leading to such a state of affairs. He appointed a Public Safety Committee of Chicago and Cook County of sixty men from representative industries. They were united for the study and prevention of casualties arising from fires, railways, trolleys, street traffic, drowning, asphyxiation, suicide, homicide, and the different industrial occupations. There were subcommittees

on safety devices, on the supervision of the construction of buildings, on publicity, and education. The last two were the first to get to work. In the line of publicity, five hundred and thirty-four publications in twenty-nine languages, having eighteen million readers, offered their columns for safety propaganda. The educational committee furnishes volunteer speakers who carry on a regular campaign for safety among the pupils of the schools in the city and county.

Mr. Hoffman has done great good to the country in calling attention to these conditions and he has set a new and a high standard for the office of coroner.

Industrial diseases. — *Definition.* — Those diseases which are contracted in, or caused by, certain work or conditions of labor, are called occupational or industrial diseases. There are few diseases so little understood as are these. As one writer has aptly put it, "We know what men do to things, — but we do not know what things do to men." The first definite action taken toward investigating working conditions leading to occupational diseases was when Governor Deneen of Illinois appointed a commission of economists and doctors to collect data on the lead poisoning industries of that state, in 1909.[24] Dr. Alice Hamilton was the investigator, and her findings were made known widely throughout the country, stirring up the first widespread acknowledgment of the fact that certain industries did tend to give their workers certain and specified diseases. Since 1909, the attention of the public has become more and more centered on this great subject, and this interest has led to a National Conference on Industrial Diseases.

Prevalence. — The United States has fallen far behind several other countries in conserving the lives of her workers. Statistics are not available to any great measure, merely because the United States has no uniform manner of taking them on this subject. The number of cases of lead poisoning in Great Britain, Germany, and Austria was formerly

as great as it is in the United States, but these countries became aroused to the situation, and through careful governmental regulation succeeded in cutting down the number of cases to from one tenth to one twentieth of what it had been ten years previous. Several of the large smelters in these countries now have an average of less than two cases of lead poisoning among every hundred men employed. In the United States it is estimated that the rate of lead poisoning in the smelting industry is at least 22 per cent, or about ten times what it is in Great Britain or Germany.[25] Our method is cheaper for the manufacturer, but it is a tremendous accusation to bring against our people, that they care no more than this for human life.

Lines of action necessary. — The necessary lines of action in dealing with this problem seem to be the following:[26]

(1) Proper investigation and understanding of the facts leading to occupational diseases.

(2) Laws dealing with specific remedies, prepared by competent commissions.

(3) The enforcement of these laws by an enlightened public.

The trained investigator has found out that many diseases we always thought were natural diseases are the result of certain occupations. In the lead factories men are poisoned by doing the dry rubbing in the finishing process, by eating with paint-covered hands, and by inhaling the lead fumes. In Germany dry rubbing is not allowed, and manufacturers are compelled to supply suitable places where the men can wash. For the lack of several simple regulations of this kind, we are letting these workers be poisoned; we are sitting by while paralysis overtakes them, — a slowly moving disease of the blood vessels which eventually leads to the heart, or causes insanity, and, in extreme cases, death. More is known about this disease than about some others of like nature because attention has been centered on it in

recent investigations, but there are many others quite as serious.

The " Phossy-jaw " which was the result to the workers with phosphorus, is the only occupational disease regarding which our national government has made any law. In April, 1912, Congress passed a law placing a prohibitive tax on poisonous phosphorus matches.[27] There are diseases due to working as a printer or stereotyper, as a plumber, an electrician, or a cutter of glass. Brass, arsenic, and mercury are each accompanied by dire effects to those who work with them. And some of the worst occupational diseases are due to the presence of dirt or filth in the working room, to bad ventilation or cramped positions while working, to excessive direct light, to lack of light, to extreme conditions of heat or cold or humidity, and to air compression and rarefaction. This last case is illustrated by the workers in tunnels or in underground passages where compressed air is necessary. The harm comes from passing too quickly from the compressed air to the open air. The result is a disease called the bends. There were three thousand six hundred and ninety-two cases of compressed air illness in one job, the East River Tunnel.[28] This means that even this one kind of occupational disease alone is a menace worth considering.

In thus reviewing these different occupations, we must not forget that it is the weaker and poorer of our people who are forced to work in these poisonous industries, because, in the necessity for work of some kind, they cannot help themselves. It is the duty of those who are better fitted to see that such conditions do not prevail. Hence laws are necessary. The American Association for Labor Legislation drafted a bill intended to meet the requirements of the situation in so far as it was possible. Eight states have passed this bill, and several others have passed laws similar in certain particulars.[29]

For the lessening of lead poisoning there must be regulations against dry rubbing, for cleanliness on the part of the workers, for the elimination of lead dust in approved ways, and for the wearing of respirators by the workers. For the compressed air illness, regulations should be made forcing employers to take care whom they employ, to have the right ventilation, and to use the approved methods of decompression with the aid of medical experts. Regulations should be made concerning excessive humidity in workrooms, or extreme cold or heat. Excessive light and bad ventilation should also be guarded against. One reason why statistics cannot be gathered is that our classification of industrial diseases is so inadequate. What we need first, then, is a uniform classification of industrial diseases and harmful substances, so that reports may be uniform. With diseases reported under their right names, and full publicity given to the results, laws, and specific laws, ought not to be far behind. When industrial diseases are recognized and recompensed as injuries received in industry, then the solution of the problem will not be far off. Having investigated and made laws, the task is not done; for the *education of the public*, the enlightenment of both the employer and the employee, plays a very important part in the solution of the problem. Laws can be evaded by employers and workmen. They thus lose their efficiency. It is of no use for a law to compel manufacturers of white lead to provide respirators for the workers, if the manufacturer pawns off a cheap, inefficient kind on the workman or if the workman refuses to wear them when provided. We must have trained inspectors to see that the laws are enforced. Then we must educate the employer and the workman, and, lastly, we must waken the public to a knowledge of the situation. M. G. Overlock, State Inspector of Health in Massachusetts, says, "The prevention of such diseases must be brought about by a systematic course of education, with the coöperation of

numerous agencies at our command. These agencies, taken in order, should be, first, medical colleges; second, industrial clinics; third, industrial hygiene exhibits, both museums and traveling exhibits; fourth, publicity, by means of lectures, leaflets, and posted warnings." [30]

Results of prevention. — That prevention is possible has been proved by what has been accomplished in other countries. Many examples could be given in our own country, where the results have more than justified the means used for the prevention of occupational diseases. Attention is called to only one of these. The Pullman company had seventy-three cases of lead poisoning in their shops in the month of August, 1911. Since then, they have adopted the approved measures for the prevention of lead poisoning, and for the four months preceding June, 1912, they had not one case.[31]

Conclusions. — The workers in these occupations are often immigrants or men of a weaker class who do not know the conditions into which they are going. Because a man does not know about them is no reason why he should be allowed to work at any occupation which may injure him bodily, which may kill and maim his children, or which may gradually make him abnormal, or insane, or an incurable invalid without means of support. Some manufacturers have realized their responsibilities, and on their own initiative have bettered working conditions. Others must be compelled to do the same. The worker must be guaranteed sanitary conditions under which to gain his living, and must be taught the consequences of overlooking the slightest precautions. The public must become aroused to these dangers in industry, must be shown what other countries are accomplishing in the elimination of occupational diseases, and must make and enforce such laws as will eliminate these evils in our own country.

Infant mortality.[32] — The care that a people takes of its

children may well be said to be an index of the character of that people. The savage nations believed that great numbers of children were a burden, and should be gotten rid of in one way or another. But ours is a civilized nation, and, as we like to say, a Christian nation. As such, we cannot allow the conditions now prevailing to remain. We have been shocked by great mine disasters, by monstrous mishaps at sea. Fifteen hundred lives lost on the *Titanic* at one time stirred the heart of the nation, but one hundred and fifty times that many infant lives are lost every year in our country alone, and people look on with complacency.

Extent. — Because of the lack of an adequate system of taking statistics on this subject in our country, the numbers for the United States are marked "approximately" in nearly all the data collected. The American Association for the Prevention of Infant Mortality has done some very careful estimating, and has compiled the most reliable data available. This Association estimates that two hundred and forty thousand children under one year of age die every year in the United States.

Rate, compared with other countries. — Other civilized countries have much more to boast of in the result of their child-saving work than we have. Out of one thousand births, the following number of children will die in the various countries during their first year.[32]

Russia	263 of every thousand
German Empire	197 of every thousand
Spain	170 of every thousand
United States	165 of every thousand
Japan	153 of every thousand
France	148 of every thousand
Canada	140 of every thousand
Great Britain	139 of every thousand
Sweden	96 of every thousand
Norway	86 of every thousand
New Zealand	76 of every thousand

For all our boasted enlightenment and civilization, conditions prevail here which cause the death of from two hundred and forty thousand to two hundred and eighty thousand infants every year, and of these deaths Irving Fisher says that "at least one hundred and twenty-five thousand need not have occurred if modern hygiene as it is known to-day were universally practiced." The number of children dying in their first year, constitutes nearly a seventh of the total number of deaths in the United States.[33] This means that at least one child out of every ten dies before reaching the age of one year.

Causes. — In searching for the causes of infant mortality, there are two main items to be considered, which may be called the two inclusive causes: poverty, producing insanitary and adverse conditions for the child's growth; and ignorance, the most widespread and deadly cause. Another classification of the reasons for infant mortality, which lays emphasis rather on the conditions leading to this state of affairs, is as follows:

Ignorant or indifferent mothers.
Lack of leisure for mothers to give the proper care.
Irresponsible fatherhood.
Disregard of personal or baby hygiene.
Bad housing.
Questionable industrial methods.
Imperfect or inadequate supervision of the milk supply.
Either inadequate sanitary laws, or a failure to enforce them.

Combative measures. — The methods which have been found effective in reducing infant mortality are: (1) the prompt registration of births to secure both reliable statements of infantile mortality in relation to the number of births, and the earliest chance to prevent certain infantile diseases; (2) the improvement of social conditions; (3) public control of sources of infection; (4) education for

parenthood ; (5) education of mothers in the essentials of personal hygiene, of infant hygiene, and of infant feeding; (6) establishment of milk stations for the sale or distribution of clean milk. The aforementioned Association believes that through these measures the present death rate can be cut down at least one half.

Public sentiment. — The first step in any campaign of prevention is the creation of a healthy, enlightened, public sentiment. Measures have been taken toward this end in several countries during the last few years. France was the leader in trying to reduce the death rate of infants, and in 1903 called an international conference on the subject. At the third international conference, held in Berlin in 1911, twenty different countries were represented. The problem was discussed, statistics collected, and preventive measures proposed; and because so many nations were represented, the discussion has become widespread. The British have now held three congresses on this question.

National Association. — The first American conference was held in New Haven, in 1909, under the auspices of the American Academy of Medicine, and as a result of this conference, the "American Association for the Study and Prevention of Infant Mortality" was organized. This Association has as its objects: (1) the study of infant mortality in all its relations; (2) the dissemination of knowledge concerning the causes of infant mortality; and (3) the encouragement of methods for its prevention. It is trying to educate and enlighten the people, to stimulate better sanitary organization and administration, and to urge the organization of a federal department of health.

Signs of progress. — In certain sections of our country, such work has already gained headway. In Philadelphia, in those districts where special preventive work was carried on, the mortality rate is 40 per cent lower than in the rest of the city. The death rate among the infants supplied with

milk by the Babies' Milk Dispensary of Baltimore is 50 per cent less than the general death rate among infants of the city. In New York City there is now an average of two thousand fewer infants dying each year than there were twenty years ago, even when the population and the cost of living have been increasing so rapidly. The change in conditions effected in several of our large cities during the last few years, shows what may be accomplished when attention is properly directed to this problem.

Children's Bureau. — The United States government has until recently done very little for child protection. The recently established Children's Bureau, with Miss Julia Lathrop at its head, has recognized this as one of its greatest problems, and has already begun to study it, and to issue literature both broadly educational and distinctly instructive. It is working in coöperation with the aforementioned Association. The problem is large, and proper attention is just beginning to be given it. Ex-President Taft says, "It is not possible to overestimate the far-reaching importance of the question of the reduction of infant mortality. It affects not only the happiness of the home, but the welfare of the nation, and the future of the race."

Health and sanitation. — *Classification of diseases.* — As in the consideration of accidents we found them preventable and unpreventable, so it is with diseases. The unpreventable diseases have less social or economic significance. We are more concerned with those diseases which have been found to be preventable. As a result of the research work of the medical men in the country, many of the diseases which were formerly thought to be unpreventable are now known to be preventable. Van Hise classifies diseases as constitutional and parasitic, and says that the problem in connection with the first is to promote the development and inheritance of sound and healthy bodies, and our duty with regard to the second is to destroy

those parasites which invade the body, giving rise to disease.[34]

Length of life. — The decline of the birth rate and the consciousness that the length of life is not a foregone conclusion have led to attempts to save and to lengthen life. In India, the average length of life is twenty-three and one half years, and this average remains quite stationary; while in Sweden, where the science of sanitation is at its highest, the average length of life is fifty-two and one fourth years. Some advance has been made in our own country. For example, in New Hampshire, in 1789, the average was thirty-five years; in 1855, it was forty years; and in 1893–97, it was forty-five; and experts declare that life can be further lengthened with proper attention given to the health and hygiene of the people.[34] Irving Fisher says that a safe minimum estimate of the number of years our lives can be prolonged here in this country is fifteen.[35] Within two decades London cut down her death rate one half. It is now thirteen for every thousand people. Sweden offers her people the greatest chances for a long life. This is due to the fact that they have dared to interfere with the personal habits of the people.[36] The United States will accomplish more when this becomes a governmental matter. Thus far we have depended too much on private initiative.

Different diseases.[34] — The main problem to be met in this question of diseases can best be brought out by considering some of those diseases which have heretofore caused our greatest loss of life, and the measures being taken to control them. Smallpox and diphtheria are not of such economic interests as are cholera, plague, typhoid, yellow fever, and tuberculosis, but in the past they have presented much the same kind of problem.

Previous to 1796, when the vaccine for *smallpox* was discovered, three hundred out of one hundred thousand people in England died of this disease. As an indication of the eco-

nomic saving through reasonable foresight in the prevention of disease, Irving Fisher cites the smallpox epidemic in 1871 and 1872 in Philadelphia. The economic loss to the city from this one epidemic was estimated at $22,000,000; whereas he estimates that the entire cost of forestalling the epidemic would have been $700,000, or less than one thirteenth of the loss. To-day, in towns and states where vaccination is enforced, smallpox gets a very weak hold, and constitutes a very small part of the big health problem. The death rate for the United States is now less than one per one hundred thousand.[37] The introduction of vaccination is said to have increased the mean duration of human life about three and one half years.

Diphtheria also used to be one of the most dreaded diseases until investigation revealed an antitoxin, the use of which has reduced the death rate from 20 to 40 per cent of those having this disease to 5 per cent. For instance, the death rate from diphtheria in Chicago and New York, from 1885 to 1894, was one hundred forty per one hundred thousand inhabitants. From 1895 to 1904, after the use of antitoxin was begun, the rate was seventy per one hundred thousand. This means an annual saving of twenty-five hundred lives in New York City alone.[38]

Cholera and the plague have been studied, and their causes have been made known. The first is caused by an impure water supply; the second is carried by rats and other rodents. Filth also fosters these diseases, and absolute cleanliness of person and of surroundings goes a long way toward their elimination. By taking immediate steps when either of these diseases is found, it can be kept from spreading; and civilized countries which take precautions are now entirely free from the great devastations which the plague and cholera formerly wrought. In India and China, these two diseases are a serious health and economic problem, but they have ceased to be a great problem in the United States.

Yellow fever was found to be carried by mosquitoes, and with the proper care of any individual case, and with strenuous efforts toward wiping out this insect, this problem no longer has the social and economic importance that it formerly had. In Havana, for the eight years before the American occupation in 1898, the yellow fever death rate was five hundred fifty per one hundred thousand inhabitants. For the first six years of this present century, the death rate was 3.2 per one hundred thousand; which justifies the statement made by Irving Fisher, that by scientific medicine and the study of preventive measures, " the United States has abolished yellow fever."

Typhoid fever presents one of our most important health and economic problems. Dr. Stiles says that " tuberculosis is the disease of civilization, while typhoid is the disease of uncivilization." [39] Certainly it is true that filth alone breeds the germs of typhoid. Other countries have obtained more far-reaching results than has ours in the campaign against this disease. According to the statistics of 1910, the last available, in Australia 15 people out of one hundred thousand died of typhoid; in Belgium, 9; in France, 8; in England, and Scotland, 6; in Germany, Sweden, and Switzerland, 4; and in Norway and Denmark, only 3; while in the registration area of the United States 23.5 people out of one hundred thousand died of typhoid. In other words, 400 people die of typhoid in New York City every year, who would not die if they resided in Berlin or Stockholm. From 35,000 to 50,000 are stricken every year by typhoid in the United States, and from 400,000 to 500,000 are prostrated by it. This means not only an unnecessary loss of life, but an unnecessary economic loss to the country. Some of our cities have instituted campaigns against this disease, but it is a matter for a National Board to work on. Typhoid can be combated by vaccination and by enforced personal and civic cleanliness. Infection carried by impure water has been the

cause of a great many typhoid epidemics. In 1890, our death rate from typhoid was 46.3 per one hundred thousand, but by taking thought, and through active measures, we had already reduced this to 9 per one hundred thousand in 1919.[37] Vaccination against typhoid has almost completely eliminated this once dreaded disease from our army.

It is estimated that about one million people are suffering from *tuberculosis* [40] in the United States at the present time, and that one tenth of all the deaths in this country from year to year, or one hundred fifty thousand deaths, are due to this disease. But tuberculosis has been found to be preventable, and, if measures are taken in time, to be curable; hence it is receiving a great deal of attention, not only from those interested in scientific preventive medicine, but also from the economists and sociologists of our country. Tuberculosis is not hereditary, is not contagious to the same extent as diphtheria or scarlet fever, and, if carefully cared for, the patient is not a menace to a family or a community. This disease is contracted only through the germ of tuberculosis, and that germ can be destroyed; therefore tuberculosis can be eradicated from the world. This means that it is one of the diseases on which preventive measures should be centered. Irving Fisher estimates that the money cost to the United States exceeds $1,000,000 per annum, and that about two fifths of this falls on others than the tubercular patient. Through the efforts of societies and associations, tuberculosis has been reduced to half what it was thirty years ago. This decrease has been gradual, but steady. In spite of this great reduction, one third of all who die between the ages of eighteen and forty-five years, die from tuberculosis. In Minnesota, from 1895 to 1910, the tuberculosis death rate remained practically stationary. During the same period, in Massachusetts, where vigorous measures were taken against the disease, the decline in the tuberculosis death rate was 39

per cent. This indicates what may be done toward the elimination of this disease.

Needs of the United States. — In the United States much remains to be done for the promotion of the health of its citizens. The underlying cause for the advance that has been made is the fact that scientific medicine is concerning itself more and more with preventive instead of merely curative measures. A change in the attitude of medical men has come about through their coöperation with economists and sociologists; and with the broader vision that has come to them, will come redoubled efforts for the prevention of those diseases which waste a nation.

Efficient local, state, and national boards of health are necessary in this movement. The state of New York finds that while the death rate in its cities has decreased in the last four or five years, the death rate in its rural districts has increased. This is due to a lack of uniformity of methods among the rural boards, and experts have given it as their opinion that all rural boards should be under a state board.[37] Health experts are necessary if boards are to do effective work, not only to investigate conditions for the boards, and to advise them, but also to arouse public sentiment on certain questions. A school for the training of health officers has been started through coöperation between Harvard and the Massachusetts Institute of Technology, and this should give good results. Politics must be deprived of its strong grip on the choice of, and the acts of, our health commissioners. Many health boards are too completely occupied with such detailed activities as plumbing inspection, garbage collection, and the agitation for pure foods to give adequate attention to some of the bigger possibilities of their office.

A bureau of vital statistics is one of the necessities for the health board, as a basis for investigation and constructive work. A good board must aim toward the suppression of

vice and toward having a clean territory, both physically and morally. It must aim for public control of sanitary conditions in schools, factories, residence districts, and public buildings and institutions. Health boards should have unified aims and work together for uniform ends. A bill was recently introduced into the United States Senate by Robert L. Owen, providing for a National Department of Health. This was to be a federal department, with a chief in the cabinet. It was to take over and correlate the different phases of this work now done by the Public Health Service of the Department of the Treasury, by the Bureau of Chemistry of the Agricultural Department, and by the Vital Statistics Division of the Bureau of the Census. The creation of this new department would be a long step in the right direction, and it is a step that must be taken in the near future. A national board of this kind should have three functions, investigation, dissemination of knowledge, and administration.

The state boards should work for such measures as the eight-hour day, protection of laboring women, restriction of child labor, sanitary factories and public buildings, the teaching of hygiene in schools, and the regulation of those activities that cause occupational diseases. Boards that are more local, must work for local sanitary conditions, such as the water and milk supply, pure foods, the control of contagious diseases, and for all that goes to make a clean city or country.

Through the press, the insurance companies, health bureaus, and the health experts, we must work for the *coöperation of the people* in all sanitary measures. Little can be accomplished without the backing of the people, — without an active public sentiment. In this connection the work of Caroline Bartlett Crane,[41] of Kalamazoo, Michigan, is worthy of notice. She first investigates social and health conditions in some city; then, by a campaign of public education, gets the hearty support of the people of that community for the betterment of those conditions. In Montgomery, Alabama, for instance,

the bad conditions arose principally from the Negro centers of the city, which were disease-breeding communities. Here she spoke in all the Negro schools, and what almost amounted to a revolution in sanitation took place. She has done this kind of work in about seventy or eighty cities, with unusual results. Campaigns for public enlightenment on these questions are best started in the schools, and a great work for personal hygiene is being started by the teaching of school hygiene. When a people can be awakened to a full sensibility of the importance of personal hygiene, then public sanitation will take care of itself.

A very significant recent movement is the growth of the science of *eugenics*.[42] Irving Fisher calls this the "science of hygiene for future generations." From our study of crime, pauperism, insanity, and feeble-mindedness, we have seen what a large part heredity plays in all of these problems, and the importance from a social standpoint of segregating the unfit. Interest in this subject has been awakened and stimulated by many associations, such as the American Social Hygiene Association, the National Committee for Mental Hygiene, the National Eugenic Association, and the American Federation for Sex Hygiene. Some of these associations have branches in a number of states. Investigations and research work are carried on, exhibits are prepared, state and national conferences are held, and wide publicity is given to the proceedings of these conferences by means of the platform and the press. Sex education is being taught in the schools, and many colleges and universities are now offering courses in genetics and heredity. In 1914 a Race Betterment Congress was held, at which many constructive measures were proposed looking toward race improvement. A number of the states have recently passed eugenic marriage laws. Whether or not such laws will prove as beneficial as their advocates hoped remains a question; they at least are serving an important function in calling attention to the whole subject of eugenics,

including the evidences of race deterioration, and the needs and possibilities of race improvement.

Pure food.[43] — As man has advanced industrially, he has become more dependent upon others. This is notably true in the securing of his food supply. Only a few years ago, practically all of his food was prepared within the household, and the family, having known the successive stages in the preparation of the food, could easily judge of its fitness for consumption. To-day, with our extreme division of labor, each household is dependent on many sources for its food supply. This makes possible all manner of adulterations, many of them yielding enormous profits, and so cleverly carried out as to be impossible of detection except by experts. Some of them are a most serious menace to the health of the people.

We first became aroused to the seriousness of these conditions about 1890, and from that time on, efforts were made to secure legislation for the prevention of food adulterations. After some sixteen years of struggle, Congress, in 1906, finally passed the Pure Food Bill. Shortly before this, the Bureau of Labor had made an investigation of the household budget of a number of families of the working class. An analysis was made of some of the foods most commonly purchased by the workingman, and the amount of adulteration indicated a most alarming state of affairs. It was shown that "the canned goods were generally freshened or colored with chemical salts, and preserved with boracic or salicylic acids," that sugar, molasses, flour, meal, coffee, tea, vinegar, milk, butter, cheese, and candies were very generally adulterated, and often with substances which were most deleterious to the health. It was also shown that diseased meats were often thrown on the market, and that meats, milk, and eggs were often kept unduly long through the use of formaldehyde and other preservatives. Dr. Gulick estimated that each summer in the United States sixty thousand babies died because they were fed on impure milk.[44] Dr.

Wiley, formerly Chief of the Bureau of Chemistry, has long been carrying on a most vigorous campaign against adulterations, and as a result of this campaign and the disclosures which were made, we have the Pure Food and Drug Act of 1906. This act fixed certain standards in foods, drugs, medicines, and liquors, and prohibited the use of various adulterants and the misbranding of articles.

A number of state laws have supplemented this law, by requiring the proper labeling of food packages, both as to quantity and contents, by prohibiting short measure, by regulating cold storage, and in other ways. Much has been accomplished by all this legislation, although we are still far from being sure of the purity of the contents of the foods which we must purchase in the market places. Since this legislation was passed, there has been a continuous struggle between the commercial and the hygienic interests, — between the rich and powerful manufacturers of food, drug, and liquor products, and the consumer who is more or less dependent on these products. The efforts of the force of inspectors in collecting samples, in detecting adulterations, and in prosecuting offenders, are being redoubled. Through their continued activity, and through the education of the public, we hope now to lessen this serious menace to the health of the people.

Conclusion. — We may wonder whether or not all the tremendous work involved in conservation will pay. Through work of this kind, the death rate in New York City has been reduced 40 per cent in twenty years. One author says, " If some spirit could show us two hundred death beds every day in this great city, and then show us one hundred and thirty other households where death would be, if medical science and social work had not prevented it, we could maybe understand what these figures mean." It is estimated that of the people who are working in the United States, five hundred thousand are killed and crippled in one year — more than

were killed and injured in the Russo-Japanese War. Irving Fisher estimates that there are 1700 unnecessary deaths every day. That is more than the number lost in the *Titanic* disaster. Besides this, there is a colossal aggregate of needless sickness. He estimates also, that of 1,500,000 deaths every year, 630,000 are preventable, while at least one half of the illness of the 3,000,000 always on the sick list is preventable. By these needless deaths and illnesses, human life is shortened, according to very conservative estimating, at least fifteen years. We have seen that the number of cases of lead poisoning in the United States is ten times what it is in other countries; that at least 125,000 children under one year of age are needlessly sacrificed annually; that one third of all the deaths between eighteen and forty-five years are from a wholly preventable disease, tuberculosis; that about 3,000,000 people in the United States are constantly lying on sick beds, at least half of whom need not be there; and that every day of the 365 days of the year there are 1700 unnecessary deaths. Considering these facts merely from the standpoint of dollars and cents, Irving Fisher estimates these preventable losses at over 1,500,000,000 dollars' worth of wealth-producing power every year. We have seen what other countries have done toward remedying such conditions; also, what certain sections of our own country have been able to do. The farther one goes into the problem, the more one realizes that it is an all-comprehensive problem, and that the best efforts of an enlightened age must be put forth toward the conservation of human life.

QUESTIONS

1. Tell of the general significance of the "safety first" movement.

2. What national organizations are coping with the problem? In what way?

3. What are some of the railroad organizations doing for safety? With what success?

4. Give an account of the work for safety in mines.

5. What percentage of accidents in factories is said to be avoidable? Tell of the work of some of our large corporations toward safety.

6. What is being done in furthering state control?

7. How are industrial diseases defined? Tell of their prevalence in the United States.

8. What lines of action are necessary? Tell of each.

9. What conclusions are drawn regarding industrial diseases?

10. How great is infant mortality in the United States? How does the rate here compare with that in other countries?

11. What are the principal causes of infant mortality?

12. What methods have been found effective in reducing infant mortality?

13. How is public sentiment being aroused on this subject? Tell about the first American conference on infant mortality.

14. What are some of the signs of progress?

15. Tell about the Children's Bureau.

16. How may diseases be classified?

17. What is said regarding length of life?

18. Give an account of the fight against smallpox; diphtheria; cholera; yellow fever; typhoid fever; tuberculosis.

19. What are some of the principal needs in the United States in the promotion of the health of its citizens?

20. What is said of the importance of health boards and experts? What are some of the duties of the different boards?

21. What is said about eugenics in its relation to public health?

22. Tell about pure food and its relation to health. What is being done towards securing pure food?

23. Summarize the conclusion to this chapter.

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SUPPLEMENTARY QUESTIONS

CHAPTER I

How has the economic and social development of your state been influenced by its altitude? Its natural boundaries and frontiers? Its isolation? Its rivers and lakes? The sea? Trade routes? Its area or extent?

What part has configuration played in the development of your own immediate locality?

What has determined the location of the principal cities of your own state? The location of the principal railroad lines?

What industries in your state are largely determined by the climate?

Compare the average temperature of your state with that of the states having the greatest extremes of temperature; the rainfall with that of the states having the greatest and least rainfall.

The soil in your locality has had what influence on the local products? How does the difference in soils affect the products in different parts of your state?

What industries in your state are dependent upon its natural resources?

Where are the principal forest areas of your state? Where is its principal mineral wealth located? How does it rank in comparison with the other states in regard to the value of its more important products?

What are the principal motive forces in use in your locality? In your state? Has any change taken place within the past few years in the motive force used? What water power is used in your state? For what industries?

Mention some of the various ways in which man has modified his environment within your own locality and state.

CHAPTER II

What proportion of the total population of the United States is found within your own state? How does its rate of increase for the past several decades compare with that of the United States?

What is the density of population of your state? Where is it the greatest? Why? How does it compare with that of the neighboring states, and with that of the United States? What is the average area per inhabitant?

What percentage of the population of your state is urban? Is any apparent change taking place at the present time in the proportion of urban to rural population? If so, it is due to what causes? What proportion of the population is found in the one, two, or three largest cities? What influence does this have on the politics of the state?

Show how the distribution of population within your state has been influenced by (*a*) drainage; (*b*) altitude; (*c*) rainfall; (*d*) temperature.

What races are represented in the population of your state? In what proportions to the total population?

What proportion of the population of your state is foreign-born? What are the principal nationalities represented in the population of your state? What percentage does each represent (*a*) of the foreign-born? (*b*) of total of foreign origin?

What is the ratio of males to females in your state? How does this compare with that for the United States? How do you account for the difference?

How many persons are there in your state of school age? How many of these attend school? How many illiterates in the state? Is the number increasing or decreasing? How does the proportion compare with that for the United States?

How many voters in your state? How many votes were cast at the last general election? What percentage of the foreign-born white males of voting age have become naturalized? Have taken out their first papers?

Make an analysis of the population of your own city (or county) along the lines suggested by the preceding questions.

CHAPTER III

How many immigrants came to this country last year? How does this number compare with that of previous years?

What nationalities were represented in largest numbers? What changes have taken place within the past decade in the relative proportion of each nationality to the total number of immigrants?

How many former immigrants returned to their home country during the year? This leaves how many as the total net gain to our population from immigration?

Compare the recent immigrants with the " old " in regard to age; sex; literacy.

What have been the principal causes for the recent fluctuations in the number of immigrants?

What is being done in this country to aid the newly arrived immigrant? Why is there so great a need for such work?

What are the principal ports of entrance of immigrants to this country? How many were refused permission to land at these several ports? What reasons were given for this refusal? How many were deported during the past year? On what grounds?

Has there been any recent legislation affecting immigration? If so, what? What are the present principal demands for further restrictions?

How many Chinese came to this country the past year? How many Japanese? How many Hindus? How does the number of each compare with that of previous years? What are the principal recent developments in regard to Oriental immigration?

Suggested Topics: The Irish in the United States.
The Germans in the United States.
The Scandinavians in the United States.
The Italians in the United States.
The Slavs in the United States.
The Hebrews in the United States.

CHAPTER IV

What is the present status of the federal child labor law?

Name some of the more prominent national leaders in the movement to safeguard the welfare of the children.

What states have passed important child labor legislation the past year? What important proposed measures were defeated?

Summarize the principal provisions in your own state regarding child labor.

How does your state compare with neighboring states in its restrictions on child labor? With the most advanced states?

What industries in your state are the most serious offenders in the employment of children? In your own locality?

What are the principal forces in your state opposed to the further protection of the child workers?

What provision has your state made regarding compulsory school attendance? How does this fit in with the restrictions on child labor?

What is being done in your community to meet the problem of child idleness?

Suggested Topics: The Work of the National Child Labor Committee.
The Children's Bureau.

CHAPTER V

How many women are classed as wage-earners in your state? This is what proportion of the total number of wage-earners? What proportion of the women in the state are wage-earners?

How do these proportions compare with those of some of the other states? How do you account for the difference?

In what industries in your state are the largest numbers of women employed?

What provision has your state made for the protection of its women wage-earners?

Compare your state with the neighboring states in this respect. With the most advanced states.

What important legislation was passed by the various states during the past year in the interest of the women workers?

What is the present status of minimum wage legislation in the United States? What has your state done towards establishing a minimum wage?

Have women the right to vote in your state? Has this apparently had any influence on social legislation?

To what extent are the women wage-earners in your state organized as trade unionists? In what industries?

Suggested Topics: Women Trade Unionists in the United States.
The Minimum Wage.
Social Legislation in Suffrage States.

CHAPTER VI

What sweated industries have you in your locality? In your state?

The work is done primarily by what nationalities?

What laws have been passed by your state to regulate the manufacture of goods in tenements and dwelling houses?

Compare your state with some of the most advanced states in this respect.

What provision has your state made for the inspection of factories and workshops?

How many inspectors are employed? Their powers and duties?

Give a summary of the work done by the inspectors the past year. What recommendations did they make?

Have any special investigations been made in your state? If so, give a summary of the report.

To what extent do the merchants of your locality carry goods bearing the Consumers' League label?

Suggested Topics: The Consumers' League.
The Sweat Shop as a Spreader of Disease.

CHAPTER VII

What are the principal labor organizations in your locality? In your state?

How large a membership have they? What have been their principal activities?

Have there been any important strikes in your locality or state the past year? If so, what was their outcome?

Has your state a Department or Bureau of Labor? If so, how is it organized and what are its duties?

What were some of the principal items of information in regard to labor conditions in the last report of your state labor bureau?

Do your local stores carry union label goods? To what extent is there a demand for such goods?

How many strikes and lockouts were there in the United States the past year? How many workmen were affected? What were the principal causes of the strikes? How successful were they?

Tell about some of the more important strikes of the past year, including the number of men involved and the outcome.

Tell of the conciliation work of the Department of Labor for the past year.

Suggested Topics: The Platform of the American Federation of Labor.
An Account of a Local Union.

CHAPTER VIII

How does unemployment the past year compare with that of preceding years? What have been the principal causes of this variation?

Were any special studies of unemployment made the past year? If so, give the result of the findings.

Tell of the federal employment work of the Department of Labor for the past year.

Give a summary of unemployment legislation of the past year.

Tell of the extent of unemployment in your own state.

What is your state doing to meet the problem of unemployment? Your locality?

Give an account of the work done by the employment agencies in your own town, or in the nearest large city.

What are the principal seasonal industries in your state? How great is the fluctuation of employment in these industries?

What is being done through your local post office toward lessening the amount of unemployment?

Have you many tramps in your locality? What assistance are they ordinarily given? What, if any, provision is made for caring for homeless men?

CHAPTER IX

How many blind are there in your state? This is what proportion of the total population? How does this proportion compare with that for the United States as a whole?

How many blind are there of school age in your state? This is what proportion of the total number of school age?

Give some of the principal items of information regarding the blind of your state, such as: age when blindness occurred, sex, color and nativity, causes of blindness, etc.

What provision has your state made for the care of the blind? Is any provision made to assist the adult blind?

Give some of the principal items of information regarding the school (or schools) for the blind in your state, such as: number of pupils enrolled, cost of maintenance, conditions of admittance, methods employed in education, alphabet used, industries taught, library, and what is done by the school as a field and employment agency for the blind.

Answer questions similar to the above in regard to the deaf in your state.

Are there any special day schools for the deaf in your state? If so, tell of them and of the work they are doing.

Does your state make any provision for the higher education of the deaf or the blind? If scholarships are offered, what is their value and how may they be obtained?

What are the principal needs of your state in its care for the blind and the deaf?

Suggested Topics: Gallaudet College.
The American Association of Workers for the Blind.
The Volta Bureau.

CHAPTER X

What provision has your state made for the care of the feeble-minded?

What is the number in institutions of your state? This is what proportion of the total population? How does this proportion compare with that for the United States as a whole?

What provision is made for the care of the epileptic? Number? Cost? Method of treatment?

Give some of the more important items of information in regard to your state school for the feeble-minded, such as: number in institution, classification, admittance, number in school, methods of training, industrial work, compulsory attendance, etc.

What provision is made for the adult feeble-minded? What control has the institution over the feeble-minded in the state? Can parents take their children from the school at their own discretion? Has the institution a waiting list?

How many insane are there in your state? Compare this number with that in neighboring states and in the United States in relation to the total population.

How are the insane cared for in your state? In how many institutions? Compare the method of caring for the insane in your state with that of some of the other states.

Tell about your nearest county or state asylum for the insane — number of patients, cost, average period of detention, number reported cured, method of commitment, etc.

What are some of the more important needs in your state for extending or improving the work done for the feeble-minded and the insane?

Suggested Topics: The Binet-Simon Test.
The Kallikaks.
The Jukes.
The Ishmaels.
The National Committee for Mental Hygiene.

CHAPTER XI

What prisons and reformatories have you in your state? Where are they located and how many are there in each?

What is the average age of commitment at your state prison? Average term served? The sex and nationality of the prisoners? How may a prisoner be pardoned?

Is the graded system in use? If so, describe its principal features? How many are in each grade?

Is the indeterminate sentence used in your state? The cumulative sentence? Tell about each.

Have you a system of probation? A parole system? Explain each. Tell of the work of the probation officer. Of the parole agent.

Tell about some of the reforms that have been adopted recently in your state prison.

Is there a school in the prison? If so, tell of the work done. What religious services are held in the prison?

What system of prison labor has your state? Describe the system. What industries are carried on and how many men are employed in each? What are the profits from the business? Does the prisoner receive any compensation for his labor?

Give a full account of such reformatories as may be located within your state.

Suggested Topics: The Central Howard Association.
The Work of Maude Ballington Booth.
The Juvenile Court.
Convicts and Road Making.
The New Order at Sing Sing.

CHAPTER XII

Give a summary of the marriage laws of your state. Compare these laws with those of adjacent states.

What states have eugenic marriage laws? Give the principal features of these laws.

What are some of the most needed reforms in the marriage laws of your state?

What are the legal grounds for divorce in your state? How does your state compare with neighboring states in regard to the ease with which a divorce may be secured?

How many divorces were granted in your state last year? In the one or two largest cities of the state? Compare these numbers with the number of marriages.

How does your state rank with other states in regard to the relative number of divorces granted?

Compare the number of divorces in your state with the number in Canada and in some of the European countries.

What are some of the more important needs in your state for remedying the divorce evil?

Is anything being done in your state corresponding to the proposed remedies mentioned in the chapter?

Suggested Topics: The Need for Uniform Divorce Laws.
The Court of Domestic Relations.

CHAPTER XIII

What were the principal forces responsible for the 18th amendment?

To what extent is temperance legislation enforced in your locality? What are the principal forces working for and against the enforcement of the law?

What has been the result in your locality of the passing of the 18th amendment? What facts can you give to verify your statement?

What was the amount of liquor consumed during 1920? How much of this was spirituous liquors and how much malt? How do these amounts compare with those of previous years?

Give a brief history of temperance legislation in your own state.

What provision did your state make for the caring for inebriates? Present provision?

Give a brief account of the recent activities and present status of the I. O. G. T.; of the W. C. T. U.; of the Prohibition party; of the Anti-Saloon League.

Give a summary of recent legislation, court decisions, or rulings affecting in any way the temperance situation in the United States.

What progress has been made in the leading countries of the world toward the control of the liquor traffic?

What is being done looking toward the control of the traffic in drugs?

Suggested Topics: The History of the Anti-Saloon League.
The Results of the 18th Amendment.
The Temperance Crusade in England; in India.

CHAPTER XIV

What system of poor relief have you in your local community? Tell about it.

Have you a county poor farm or almshouse? If so, tell about it — the number cared for during the past year, cost per capita, how the expenses are met, management, etc.

Give an account of the work done by the city mission in your home town or in the nearest large city.

Give an account of the work done by the charity organization society of your home town or of the nearest large city.

What homes for dependent children are there in your community or state? Tell of the work done by each.

Is any special provision made for the aged poor in your community or state? If so, tell about it.

Does your city have a municipal lodging house? If so, to what extent is it used? Does your city have a bread line or a soup kitchen in the winter months?

Are there any other organizations for helping the poor in your community? If so, tell about them.

What is your city doing to improve the housing conditions?

Suggested Topics: The Cost of War.
The Single Tax and Housing Reform.
Recent Studies regarding the Extent of Poverty.
Recent Studies regarding the Concentration of Wealth.

CHAPTER XV

Give an account of the work of the National Forest Service for the past year. How great an area was reforested?

What were some of the most important water powers developed during the year? Irrigation projects?

What was the value of our principal mineral products for the past year? How do these values compare with those of former years?

Tell of the production and the extension of the use of natural gas for the past year.

How did the production of the precious metals the past year compare in amount with that of previous years?

Give the acreage and total production of some of the principal grains the past year. How do these amounts compare with those of previous years?

What was the average yield per acre of these grains? Compare this average with that of previous years.

Compare the production of some of the principal grains in the United States with that of some of the foreign countries. Compare the average yield per acre.

Where does your own state rank in the production of the principal minerals? In the production of the precious metals? In the production of the principal agricultural products?

Suggested Topics: The Economic Waste from Soil Erosion.
Water Power Development in Your Own State.
Irrigation Projects in Your Own State.
Conservation of Natural Resources in Your Own State.

CHAPTER XVI

What were some of the more serious diseases of cattle in the United States the past year? Tell of the area infected, estimated losses, methods, and success in controlling these various diseases.

Discuss similarly the diseases of sheep.

The diseases of hogs.

The diseases of horses.

What were some of the more important insect pests of the past year? They extended over what areas? They caused what estimated losses? What measures were taken against the pests and with what success?

Discuss similarly plant diseases.

What were some of the more important losses due to depredations of animals? What measures were taken to prevent these losses?

What measures have been taken within the past year or so looking to the protection of our wild game? What areas were set aside as game preserves?

What are some of the more important grains and fruits that have been introduced into the United States recently? What of their economic possibilities?

Suggested Topics: The Cotton Boll Weevil.
The Foot-and-mouth Disease.
Hog Cholera.
Protecting Our Song Birds.
Any Special Losses in Your Own State.
Any Special Activities of Your Own State in the Conservation of Its Plant or Animal Life.

CHAPTER XVII

What were the principal developments the past year in the campaign for "safety first"?

How does the number of accidents in coal mining the past year compare with the number in previous years? How does the number in this country compare with that in some of the foreign countries?

How many were killed or injured in railroad accidents the past year? Is the number annually killed or injured increasing or decreasing?

Compare the number killed or injured in railroad accidents in this country with the number in some of the principal European countries.

What were some of the principal measures taken by your own state during the past year looking to the lessening of the number of accidents?

What was done during the past year looking toward the lessening or eliminating of industrial diseases?

What gains have been made the past year in lessening infant mortality? Give some of the recent statistics on infant mortality. Compare these statistics with those of some of the European countries.

How do the mortality statistics of your own city and state compare with those of other cities and states?

What was some of the more important pure food legislation of the past year? Was any such legislation passed by your own state?

Suggested Topics: The Anti-Tuberculosis Crusade.
The Conservation of Infant Life.
The Conquest of Yellow Fever.
The Struggle against Typhoid Fever.

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